COUNTRY



·NOTES

RITICISM is, as a rule, acutely and universally exercised over the formation of a new Cabinet, but it has been wisely held in check on the formation of a Coalition Ministry. Even the oft repeated phrase, "England does not love coalitions," has not been abused. It has been recognised that the reorganisation of the Cabinet has been rendered necessary by circumstances without historical precedent. The aim has been to produce a Ministry as fully representative as possible, so that if it should be necessary to take novel and strong measures to increase the number of our fighting forces and adequately equip them with arms and munitions of war it will command the full assent and whole-hearted support of the public. What is wanted to make this strong measure successful is loyal and whole-hearted national support. Everything worth living for depends upon victory being achieved, and till that has been done all questions must be subordinated, all personal ambitions and predilections must be laid aside, so that the inhabitants of our great Empiremay act as one man, each devoting what force or influence he may possess to a stubborn and energetic prosecution of the great enterprise now in hand.

IF we look at the important posts it will be agreed that they are manned in a way to secure this end. Unionists willingly acknowledge the fitness of the members of the old Cabinet who are retained. Mr. Asquith is a great Prime Minister, and his continuance in that post of leadership is a guarantee of continuity in policy. Sir Edward Grey could not be bettered as Minister for Foreign Affairs, and should the stress prove too much for his health he could not have an abler coadjutor than the Marquess of Lansdowne, who is given a place in the Cabinet without portfolio. Lord Kitchener as Minister of War has brought his great organising powers into play with brilliant and conspicuous success. Behind the cynicism and dilettantism of Mr. Arthur Balfour there is a seam of hard Scottish grit and dauntlessness revealed only in the most crucial moments of his career. He may be trusted to discharge the duties of First Lord in a manner worthy of the Empress of the Sea. It is a matter for satisfaction that Mr. Asquith has retained the late occupant in the Cabinet. The not too overwhelming duties of the Chancellor of the Duchy of Lancaster will enable Mr. Churchill to use his energy and courage to good purpose in forwarding the work of Mr. Lloyd George and helping the fighting forces.

A NOVEL but most satisfactory appointment is that of Mr. Lloyd George to a portfolio started to meet the exigencies of the moment, that for Munitions. How terribly in need is Sir John French of more men and more ammunition was vividly brought home to us all on Tuesday by a letter from Michael Furse (to give him the name familiar to many), the spirited and patriotic Bishop of Pretoria. His picture of brave men depressed by long spells of trench work without adequate relief, and by having to face an army fully equipped with big guns and ammunition, while, owing to laxity at home, they have not the material with which to

reply, should send a thrill of shame and new energy through Britain. Returned officers more than confirm the Bishop, and tell of the terrible losses caused by scarcity of the right sort of ammunition. Mr. Lloyd George's intelligence, adaptability, go and energy admirably fit him for stepping into a post which will make a heavy demand upon these qualities. We may regard Mr. M'Kenna's occupancy of the Chancellorship as the temporary assumption of the post by a clever understudy. In other respects the Ministry is a strong one. It brings together much talent, and although the Premier's tact will be more severely taxed to manage a Coalition than an administration formed of his own followers, we trust that the high heart of patriotism rising above petty considerations will make all pull together with one mind and one will.

ITALY'S entry into the war completes its European character. No great power now stands out, and the contest assumes a form which history does not parallel. The war is unexampled in every respect. In it are involved numbers which dwarf the immense hordes of antiquity, and they are armed with weapons imparting a power of destructiveness beyond conception. Nor is the issue unworthy of the forces engaged. It is, let us hope, the last fierce struggle of the Central Powers, aided by Turkey, to impose on the world all that is represented by absolutism in sovereignty, might in politics, and lawless, arrogant disregard of every criterion of conduct but success. The Entente Powers, on the other hand, are all democratic. France is actually a republic, Britain and Italy democracies tempered by constitutional monarchy, Russia a great empire just emerging into unison with the free peoples of the West. Morally, the force is all on one side, but the military energy is not correspondingly distributed. Fighting is a gospel with the Central Powers, and is so taught and practised. For thirty years they have been training for war. Against them are arrayed for the greater part men of peace who have been compelled to sally forth for the defence of hearth and home because of an unprovoked assault by stout and desperate marauders.

IN such a contest it would be rash and almost criminal for the people in this country to be too confident. They will be better advised to weigh well the warning addressed by Mr. Lowther to an audience in Penrith. It is no light matter when the Speaker of the House of Commons finds it incumbent upon him to warn his fellow-citizens that the accounts from the seat of war are too rosy, they magnify each little success and often ignore reverses, thus giving a false impression of our strength and the enemy's weakness. But it is plain that so far we have been only holding the enemy. Not yet has the full power of the Empire been brought to bear. Far too many men capable of bearing arms are still outside the ranks. Lord Kitchener it is true has added to his great reputation by achieving the impossible. He has got together an army which in quality as well as number has taken the conscript countries by surprise; but it is not yet large enough, and it was inevitable that the preparation of arms and munitions should lag behind the enlistment of men. The Speaker in effect is rousing the country to recognise clearly the greatness of the issue, the fact that, though at present protected by the silver sea, only sixty miles away our gallant army is fighting, not only for existence of the Empire, but for the safety of our children and the honour of our women.

BLUEBELLS.

A delicate, fine fairy came trailing down the wood, All in the Spring on the soft west wind, Her eyes made for dreams and her mouth for a mood, And her veil of blue gossamer floating out behind.

One said, "A bit of Heaven dropped from the skies."
One, "Common bluebells!" that had no soul to see;
But I who had the wonder-dust blown into my eyes
Know heaven and earth and fairyland are one in three.

DOROTHY FRANCES GURNEY.

LORD Derby's attitude to the subject of racing, as expressed in his letter to the *Morning Post*, on Saturday last, is the best that can be adopted. His view is that we are bound, in the first place, to accept frankly and loyally the decision of the Government. The latter is founded, according to Mr. Runciman's courteous and considerate letter, on the necessity for keeping the railways clear for military purposes. All that this implies does not appear on the surface. As Lord Derby pointed out, the Government probably has infor-

mation not accessible to the general public and, if we may hazard a guess, that information may be that there is at least a probability of the Germans attempting a descent upon these shores. At any rate, on a question of this kind the only right thing to do is to accept the decision of the Government and the Jockey Club as final.

INSTEAD of bewailing the great and indisputable disadvantages and losses which must follow from the stoppage of race meetings, Lord Derby's advice is that those who have the interests of horse-breeding at heart should do everything that lies in their power to make the best of such opportunities as remain. The meetings at Newmarket are not to be inter-fered with. It is understood that the Government will not object to some at least at Newbury, and it is officially stated that Irish racing will be allowed to continue. All Englishmen, and particularly the soldiers at the front, will regret that under the Jockey Club rules the Derby cannot be run at Newmarket. All the same, it is necessary to nurse and at all events keep alive the great horse-breeding industry. How best to do this is a problem to which leading sportsmen should address themselves.

EVEN amid the intense anxieties of war and the excitement of political change, the railway accident at Gretna, near Carlisle, arrests attention like some great peal of thunder heard just overhead in a raging storm. Exactly thunder heard just overhead in a raging storm. how it occurred will be made plain by the official enquiry which is opening as we write. All publicly known at present is that a troop train collided with a local train, and that horror was piled on horror by an express from Euston dashing into the ruins of the two. It would serve little purpose to harrow the feelings of our readers by describing the frightful scenes that ensued. Fire and the locking of living limbs by the broken wheels and débris of the carriages appear to be inseparable from such calamities. A cause for special regret is that the lives of over a hundred soldiers were lost-gallant men who in battle would have faced death willingly. It is sad indeed to think their dreams of doing something notable for their country on the field of battle should have been foiled by a railway accident. Their names deserve to be enshrined on the Roll of Honour.

THE most satisfactory feature of the trial of the spy Kuepferle, who has thwarted justice by committing was that pointed out by the Lord Chief Justice. It was that a spy who landed on our shores on a Sunday afternoon and wrote three letters between that day and the following Friday, was arrested within a week of his landing. On the exterior, the letters were harmless, but suspicions having been aroused, it was found that each contained a secret message written in an invisible ink formed by mixing formalin and lemon juice. These messages contained information likely to be of great use to the enemy, though what it was we do not know, as, owing to its importance, the Court ordered the case to be heard in camera. What the public will appreciate is that there is watchfulness on the part Censor. At the moment there is urgent necessity for keeping a look-out for espionage.

AN excellent example has been set by the London County Council in its treatment of such of the tramway strikers as are fitted and capable to serve their country. been ordered to return their uniforms and badges at once. The country will fully endorse the action of the County Council. In favour of these strikers there is, as far as we can see, nothing They have attempted in the most barefaced way to be said. to advance their own interests by playing on the necessities of the country. They have shown no sense whatever of the of the country. They have shown no sense whatever of the national need of service, as witness their refusal to run trams to the arms factories at Woolwich and Enfield. In this way they have endangered the lives of many men at the front and have helped to put off the decision of the war. We cannot help remembering in connection with this that several of those who have come back from the front have found their young men who are as fit as they are themselves to be with His Majesty's Forces.

SIR EDGAR SPEYER, BART., is in one of those curious difficulties created by the British Constitution. His letter to Mr. Asquith is too recent to need recalling. In it, it will be remembered, he wished to lay aside the honours conferred on him by the British Government. Apparently

he looked upon a title as Cardinal Wolsey did upon his cloak of office, which he put off when he went home, exclaiming: "Lie thou there, Lord Chancellor of England." So Sir Edgar Speyer, Bart., would fain have resumed his first appellation, Mr. Speyer. But the Prime Minister, in a letter full of sympathy with his indignation at the "baseless and malignant imputations upon your loyalty to the British Crown," goes on to say that "the King is not prepared to take any step such as you suggest in regard to the marks of distinction which you have received." Those learned in the law hold that a title once given cannot be laid aside. It becomes inherent in the blood of the recipient.

A BARONET is not a peer and it therefore might be argued that the rule would not apply to Sir Edgar Speyer; but if we consider the reasons why a peerage cannot be resigned, it will be found that they apply equally well to a baronetcy. A peerage is something more than a personal distinction. It is an honour which is given to the family, or the blood. A peer cannot decide by will who is to succeed him in the peerage, because the title is strictly entailed, and therefore it is held that it would be unjust to his descendants if he were allowed to divest himself of it. Lord Davey gave as the reason that a title of honour "is a personal dignity which descends to his posterity and is fixed in the blood." But although baronets came into existence much later than peers, the first being created by James I in 1611, the same argument applies equally to them. A baronet cannot get rid of his baronetcy unless he is guilty of treason, in which case the honour is forfeited. Sir Edgar Speyer, therefore, although no law compels him to have himself addressed as "Sir," with the mystic "Bart." at the end of his name, and he can indeed call himself plain "Mr.," still must remain a baronet.

FATE'S irony is cruelly exemplified in the death of Sir George Farrar. At the very moment when he was enjoy-ing a great success—for it is universally admitted that the defeat of the Germans in South-West Africa was largely due to his masterly organisation of the supplies-he was killed in a miserable railway accident which might have happened to anybody almost anywhere. By it a strenuous and splendid life has been removed from South Africa. Sir George Farrar was a native of Chatteris in Cambridgeshire, and a nephew John Howard, the famous Bedford engineer. joined the firm at an early age, and the fact that it had branches at Port Elizabeth and East London accounts for his early transference to Airica. His success was rapid. But his attention was not confined to business. During the South African War he raised two regiments of South African Horse, and himself served with great distinction as major. He was mentioned in despatches and earned his D.S.O. In the work of reorganisation he was equally active, and his baronetcy was bestowed on the proclamation of the Union in South Africa. His death is a very great loss to South Africa.

BONA MORS.

Dear, though I die, and haply no more see The day's last rose fade gently in the west, Nor ever hear the throstle's melody, Nor watch again the lilac's blossoming, Since Death will have it so, myself shall be Blossom and bird and miracle of Spring, Lost in the sweet earth's immortality, Part of this beauty born at God's behest: Dear, though I die, it is no grievous thing!

ANGELA GORDON.

ACCORDING to the Board of Trade returns, the rate of unemployment in April was the lowest that has been experienced for twenty-five years. On analysing the returns it is seen, as might have been expected, that the shortage of male labour is felt most in engineering, shipbuilding, coal mining and agriculture. Industries connected with war contracts continue to be very busy, and the employment of all the textile industries also points to work being done for military equipment. It is good to know that the high wages which are now earned are not being wholly wasted. In what we may call the munitions area there has been a very substantial increase in the deposits at the Savings Bank, and even in other banks the deposits have very much increased. This is all to the good. Probably the time is not far distant when those savings will be required. Workmen should never forget that their prosperity at the moment is due to the military exigencies and that they must not accept the present state of things as permanent.

ENGLISH MOORLANDS AT WHITSUN.

HITSUNTIDE is the most beautiful holiday of the year. Easter contains only the promise of things to be. In August the freshness of the year has gone. But at Whitsun spring has reached its zenith of exquisite colour. Not yet are the wild roses out with the charm that carries with it the melancholy news that the

his ardour is required to keep him from surrender to the feeling that to withstand the biting winds at the streamside, or the scarcely less cruel draughts in his hostelry, a dish of trout is not sufficient reward.

But in the more benign south, Whitsuntide is the time of times for the true nature lover. It is not too hot and not too cold. He can buckle on his haversack and step forth



J. H. Symonds

CARRYING FOOD.

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spring is over and gone yielding place to the mature but sobered fulfilment of summer. I speak of the south; if you travel northward the spring is overtaken. Now, and until June is past, bleakness reigns over strath and corrie. Even the angling enthusiast, solitary explorer of these regions in this early period of the year, knows there are days when all

stimulated and refreshed by a breath of wind that does not cause him to shiver, and yet has not altogether lost its sharpness.

If the sun shines it is to diffuse a genial warmth, not to scorch and enervate and drive him to the shade. And he is comforted by knowing that, although some things are



TWO BUSY PARENTS.

past their prime, others are only advancing to it. The glorious white of the wild cherry disappeared amid the heavy rains, but the gold of the laburnum is breaking through the



THINKING WHAT NEXT?

delicate green foliage, and in sheltered, sunny nooks the hawthorn has already brought forth sprays of its fragrant snowy blossom and hung out strings of white beads telling that the greater glory is on the way. Most beautiful of all, on common and fox covert, on wild bank and wilder moorland, the gorse has come into bloom. In a sense it is never out, a fact embodied in the universally known saying that when it is out of flower, kissing is out of fashion. But the occasional flower which comes on it all the year round is nothing compared to the colour it develops what time May is merging into June.

I must digress a little to pay a tribute of praise to this queen of shrubs. In character it is prickly and forbidding, hence the hunter of foxes has chosen it as affording the best cover for his quarry. The attention is very much appreciated by the recipient, though the vixen often makes her favourite earth on the outside of it. How well I remember in the May morning of long ago—not breakfast time, but the real morning, when, as the classical poets say, Aurora first begins to stretch her rosy fingers in the east—stealing softly along the side of a tall hawthorn hedge to see the cubs at play, gamesome as puppies, though even,



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A TIT-BIT.

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at that early stage, alert and suspicious. In an unconscious moment on the part of the spectator, or his scent, carried by a whiff of wind, they disappeared, and this far more quickly than the little rabbits nibbling at no great distance, who



PEERING OUT.



J. H. Symonds

THE BREADWINNER.

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would but rise on their slender hind legs and cock their pretty ears. Nature may be red in tooth and claw, but she does not encourage Hymns of Hite. The rabbits, which the fox devoured when it could catch them, took advantage of the same cover. On the edge of a neighbouring spinney a sparrow-hawk nested, and its presence did not scare away the blackbirds, robins, thrushes and other small birds who reared their young in sight of the tree cleft where the hawk had her evrie.

The fox covert tumbled down in broken ledges to the green banks of a stream, where the deadly and patient heron stood in the shallows waiting to transfix whatever in the nature of fish might pass that way. Yet the peace and growing energy of May brooded over all, and seemed to rebuke their antipathies. I think somehow it is this inner peace which enables a great nation to shed the blood of the young and brave, not, indeed, without regret and grief, but with a tranquillity born of the knowledge that the destiny alike of the individual and the mass cannot be achieved without sacrifice. Whosoever shrinks from sacrifice, be it a man or a nation, shall pass from active, joyful, emancipating progress to inertness, tribulation and death, spiritual and physical.

But let us return to the gorse. Consider what a prickly, or, as we say of a tough man, what a hard-bitten creature



AT THE NEST.

it is. You find it thriving where all else starves. It grows and blooms amid stones and rocks, where the sustaining earth is distributed only in pockets. Nay, if you observe more closely you will see that it prefers cold and exposure. Given two banks, one looking south and the other north, the gorse seems to thrive on that wherein it enjoys least shelter and is exposed to the roughest blasts. When a snowstorm covers the hill up we sometimes see protruding from a covering mass of snow a single twig with a little bloom on it, yellow and as if smiling on the desolate scene. Yet a great mistake is made by those who imagine this bold, hardy and tenacious plant can be shifted at will, that its nature will enable it to withstand the most careless treatment. On the contrary, those who, moved by its beauty, essay to transfer it to the luxury of an enclosed garden are woefully disappointed. It is a fastidious and capricious plant.

Miss Jekyll, with her unfailing taste, has recommended its use for the adornment of banks in the garden, but those who would win the friendship of the gorse must begin when it is young, either by sowing seed or purchasing small and preferably seedling plants. If allowed to

reach maturity in its moorland surroundings it resents transference to a garden as much as a born Highlander dislikes town life. Both are apt to wither and die from the change.

The gorse may be grown in a garden, but I love it most on the open moorland. This love is modern. Our forefathers looked upon the plant with no æsthetic eyes. "If hosen and shoon thou ne'er gavest nare, The whins shall prick thee to the bare bane" is sufficiently expressive of their attitude. They had too hard a fight in order to compel a livelihood from Mother Earth to recognise beauty in a shrub that told of barren soil and was in itself of little use. Not that it was entirely without value. Farm stock in the hard times of winter were fed on its forbidding foliage, and rabbits love it.

To this day they shelter under its prickly cover, and their nibbling testifies to some kind of goodness under a very rough exterior. But in their day men's dependence on agriculture was direct. They not only lived on the fruits of the earth, but of their own earth. With us the essential fact remains, but circumstances have changed. No life would be possible if the earth did not yield her increase, but the means of taking it have been removed several stages further away. The baron of old time received his home-grown provisions at the castle gate; we buy from shops supplied by several stages of middlemen, some of them dealing with the products of soil far across the ocean. So in taking our walks abroad the mind is free to dwell on form and colour, heedless of mere utility. Labour has been endlessly divided. That it should be so is well. We may wander by stream and moorland and drink in what pleases the eye and ear without calculating utility. In such a frame of mind there are few pleasures to compare with a spring walk over moorland when the gorse is in full bloom. Close at hand each bush is of burning gold; in the more distant view the whin blossom bronzes the landscape. On such a tramp there are few living companions.

Larks rise and sing, as they do almost everywhere at this season. Seagulls beat up and down, especially where there are streams. A heron flies from its nesting place to its feeding ground. But these belong to exceptional occurrences; our one constant companion is one of the moor folk, a handsome bird with little gift of song, which at our approach flies from one stone to another, for the most part disdaining to perch on the whin. If its nest is in the neighbourhood it goes on and on as if driven away, but anon wheels back and takes up a watchful position in the stranger's rear.

No merry casual tramp drunk with inhaling the fresh air stands much chance of getting on terms so familiar as the photographer to whom we are indebted for these vivid studies of the whinchat's domestic life. The name is something of a misnomer. As a matter of fact, country

people in the North of England, who always talk of whin and never of gorse, use the word whinchat indiscriminately. Whatever appears on the moor or on the edge of the moor is given this name. A stonechat to them is a whinchat, and so is a wheatear. Thus the proper whinchat is very seldom named correctly. As if to complete the confusion it is not constituted. fusion, it is not so partial to the gorse as is its cousin, the stonechat. The whinchat, as far as my experience goes, loves best to frequent those new plantings which have been made on the moor either for timber purposes or for reclama-It likes the neighbourhood of young trees, and nests freely among them. When the trees advance in size, it ceases to care for that particular haunt. Occasionally a nest may be found on the little scrubby hawthorn bushes which grow up, not, indeed, on the high mountain sides, but on the minor shoulders of the hill, where cultivation is still well within The whinchat can scarcely be described as a moorland bird, although it loves those stony grasslands or hilly pastures which lie close to the moors and are akin to them. In a long walk over moorland the bird may be very frequently observed. It is not quite so cunning as the stonechat, and its nest is very easily found. As evidence of the confusion to which we have already referred, Tunstall, an early writer of natural history wrote of the whinchat under the heading stonechat. " It builds wrote of the whinchat under the heading stonechat. "It builds in whins," he says, "and is perpetually flying up and down when anyone approaches, repeating a cry like 'Eutic,' by which I judged it to be the whin chat." The passage is quoted in "The Birds of Yorkshire," and in the same chapter the vernacular names given are whinchacker, bush-chat, grass-chat, hay-chat, hay-bird, and stone-chat. XX.

THE UNFOLDING OF A ROSE.

HE blooming of the first rose of the season is looked forward to with great eagerness and its appearance hailed with delight. An involuntary exclamation of pleasure escapes us at the sight of its delicately curled petals expanding in the morning sunlight. If we would witness its gradual unfolding we must rise a little earlier than usual, as the bud generally commences to burst in the early morning. At this time of the year (June-July), when the rose is seen to perfection and we are reaping the reward of our careful pruning, it is very interesting to study the development of a rosebud. Its first appearance on the stem induces a feeling of wonder that such a tiny bud will shortly bloom into a beautiful rose perfect in form and colour.

A day or two passes, and imperceptibly the stem thickens and the bud expands and matures. Only by close scrutiny can we detect the gradual change which is taking place from day to day. To assist us in our study we may call in the aid of a camera, which, used intelligently, skilfully depicts for us the wonderful growth of this queen of flowers. The photographs thus obtained



PHOTOGRAPHED AT INTERVALS OF TWO DAYS AT 1 P.M.



TAKEN AT 6 A.M. AND 8 A.M. ON THE SAME DAY.

at short intervals show the progress clearly, and are at once interesting and instructive. The climax of perfection in this branch of photography is seen in the wonderful cinema productions which show the growth of the plant, followed by the appearance of the bud and lastly the flower. As these records appear on the screen we marvel at their completeness. But for purposes of comparison they are of little value, as we fail afterwards to remember the details. Only by a set of photographs which we can examine at leisure may the true development of plants be studied. Perhaps the following description of how the accompanying photographs were obtained may prove interesting to those who may wish to make a similar set. Three buds were at first selected, on three different trees, and a plate exposed on each. The exact position of the tripod was marked so that the same point of view could again easily be obtained. Two days later a grub had marred the beauty of the first bud, and later on green fly smothered number two, so that our attention was centred on the third bud, which promised to become a fine bloom. The small bush on which it grew was hybrid tea-Mme. Ravary

Each day saw a slight change, but a record made every second day was found sufficient at first. On the sixth day, however, the bud began to show signs of opening (see No. 4). Knowing how rapidly this class of rose blooms, a close watch was kept, but no great change was noticed that day. The next morning, shortly after six o'clock, 1 found the bud had commenced to open, and a photograph was taken at once (see No. 5). Two hours later, so rapidly was the rose changing that another plate was exposed. The result (seen in No. 6) shows the bloom at its perfection. This was the most interesting part of the proceedings. wards noon the rose had lost some of its beauty by opening too full, and No. 7, taken the following day to complete the set, shows the rose fully ex-panded. The colour resembled a W. A. Richardson, and can only be described as light salmon buff. For the benefit of those who may try their hands at a similar subject the following details will be useful. bud should be chosen facing

south for preference, as the blooms naturally incline a little to the sun, also the lighting is better from this side. The best buds are found on the strong new shoots which form after close pruning. A certain amount of patience is required, and care should be taken to obtain the same point of view for each successive exposure. Orthochromatic plates or films should be used to ensure a better rendering of the foliage. The date and time of day should be noted and marked on each negative. This is an important point to note. Many other flowering plants also prove good subjects for study-the lupin, for instance, with its

rapid and sturdy growth. Each variety, however, requires slightly different treatment, but sufficient has been said, I think, to show the interest of this

MAINTAINING OUR RESOURCES.

THE Board of Agriculture has issued a notice stating that its attention has been drawn to the fact that the prevail-ing conditions are causing many farmers to experience difficulty in maintaining the normal standard of production of their holdings, especially with regard to live stock. The shortage of labour and the increased cost of feeding stuffs, in conjunction with the high prices at which all classes of stock are selling, are tempting a

number of farmers to make an immediate profit at the expense of future output and increased returns. Many breeders are marketing their stock before it has arrived at maturity, and several dairy farmers are reducing their herds to an extent that is very much to be regretted. The slaughter of female animals suitable for breeding is particularly undesirable. Such is the burthen of the Board's complaint, and then it begins to discuss remedies. of these are highly diverting to the farmer. Thus: "The shortage of milkers appears to have tended to the dispersion of dairy herds in part for slaughter, but it must be remembered that the calf is nature's milker . . . it may prove a profitable venture to adopt the practice still common in many pedigree and beef herds of rearing two or three calves on the same

cow, more especially having regard to the high price which store stock is likely to command for some time to come. What would a cheese-making farmer do in following such advice as this? A deep milker might provide sufficiency for three calves, but all dairy farmers know what trouble follows the rearing of lean calves. We know beef breeds are not heavy milkers, and that milk is the bloom for pedigree money; but that bloom does not fetch the same value for non-pedigree work. And besides, where are the calves to be obtained? At a local sale yard last week



THE NEXT DAY.

plenty of ill assorted, bad coloured and such-like bull calves were only making from 25s. to 40s., unless they were of real value; whereas hardly a heifer calf could be obtained under 70s. value; whereas hardly a heifer calf could be obtained under 70s. Of course, with more calves reared there will be less milk available, and meal substitutes are very dear for calf rearing. In fact, Quaker oats—a human food—mixed with a little separated milk is the cheapest food that I know for calf rearing at present, having regard to quality. So far as I can see, calves are not being unduly slaughtered, and small farmers especially are rearing to the utmost of their capability. Then, the Board touches on the cost of pig feeding, which may be reduced if store pigs and sows are allowed to run out on grass or on green crops such as rape, when they will pick up the greater portion of their living. In these days of scarce labour, are farmers likely to grow rape for pigs? And what dairy farmer grows rape at all? If the Board had kept the offals and maize that have been exported to Scandinavia it might have stopped the killing off of the pigs, which now that fat values are retrograding is likely to increase which now that fat values are retrograding is likely to increase to even larger numbers. Again, the farmers are requested to grow their usual quantity or more of hay, and even boy labour is not available to make the little that it is proposed to

be grown. The farm labourer that sticks to his work of producing ood for the people is as deserving of a medal as those who turn out shells to blast the Germans with. I am a farmer and among farmers, and I know that they are straining every nerve to cope with the existing situation. The Bath and West Show will furnish evidence of this. For over fifty years Mr. George Gibbons of Tunby Farm, near Bath, has been associated with it, and heas been stoward of the working dairy since it started at the of Tunby Farm, near Bath, has been associated with it, and he has been steward of the working dairy since it started at the Brighton Show; but he will not be there this year. At over eighty years of age he has to work his farm. He will not be replaced by his son, Mr. Henry Gibbons, the steward of the milking competitions hitherto. Mr. Henry Gibbons has his two sons in khaki, and perforce he must stay at home to see to the cows. It is the same everywhere. In the parish of Dundry, near Bristol, there is one farmer's son only of military age left at home and the labourers' sons are gone as well. How under at home, and the labourers' sons are gone as well. How, under such conditions, are we to continue to farm as usual? The writer of this note is not in bed after four o'clock any morning, as not only has he to manage his farm, but help to work it as well. Surely we who are farming know what we are talking and writing about.

W.

FORM AND COLOUR ARRANGEMENT AT THE CHELSEA SHOW.

By H. AVRAY TIPPING.

HAT the Chelsea Show should be held with its customary completeness in the very midst of the great war is proof of the potent hold that horticulture has obtained over our generation of English men and women. The springs of the movement first bubbled forth half a century ago, but it is scarcely longer than the opening of this century that it revolutionised our shows. In extent of effort, variety of material and ambitiousness of display there is no comparison between the shows of to-day and tho our youth. Indeed, it is revolution rather than evolution. our youth. Indeed, it is revolution rather than evolution. It is no longer a confined series of cut blooms of certain florist flowers, or even a small parallelogram of greenhouse plants in pots. In the general abundance there are specimens of everything; but what is now and noticeable is a general effort at grouping at p oducing the effect which plants should have in the garden; a obtaining, indeed, something in the way of garden picture, so the way may learn not so much what single blooms or plants, so that we may learn not so much what single blooms or plants are like, but what to aim at in the selection, growing and arrange-ments of the denizens of our gardens. This tendency appears ments of the denizens of our gardens. This tendency ap not merely in the complete little rock and formal gardens

not merely in the complete little rock and formal gardens constructed in the open, but in the exhibits of every class of shrub, plant and bulb brought together in the great tent.

Our nurserymen are to be congratulated on what they have already done in this direction. Yet it is very necessary to point out that they have still a long way to travel, that they have much to think over and study, to experiment with

There are most regrettable examples of what ought not to be done and how not to do it—regrettable because vast quantities of choice and well grown plants have been raised, transported and exhibited with an infinite amount of trouble merely to cause pain to anyone with even the glimmerings of a sense of form and colour. A huge pyramid of giant-flowered cinerarias grown and set with such regularity that the outline is as hard as if the substance were rock, and with every colour mixed, although crimson mauves and red purples predominate, has at its side a smaller pyramid of scarlet Hippeastrums rising out of a sea of hot mauve Primula obscarlet Hippeastrums rising out of a sea of hot mauve Primula obconica. A second big pyramid, equally solidly constructed and
topped by an absurd little palm, is composed of an upper
block of pink schizanthus and a lower block of yellow, orange and
bright red calceolarias, while a ring of scarlet begonias is set
round a dome of salmon-pink clarkias. The material is all superexcellent and, had it been grouped with some looseness and a
right association of tones, would give undiluted pleasure to the
many who love indoor florists' flowers. This should receive close
attention, and an effort to reach a really satisfactory scheme of
display should be made. With roses this has been done. But
then it is much more easy, for the colours are less contentious display should be made. With roses this has been done. But then it is much more easy, for the colours are less contentious and the growth freer. Still, it needed appreciation of possibilities to get such effective rose circles as those of Messrs. Cutbush and Messrs. Hobbics. The former has a delightful undergrowth of dwarf polyanths swelling up into a series of low domes, while tall weepers and standards rise up with much grace. Here nearly all the effect is produced by the polyanth and Wichuriana hybrid all the effect is produced by the polyanth and Wichuriana hybrid sections, just occasionally broken by a little group of teas to give decision with their larger blooms. Messrs. Hobbies have also made free use of the polyanthas, such as Mrs. W. H. Cutbush for groundwork and Thousand Beauties for garlanded weepers; but teas, such as Lady Hillingdon, break up the groundwork effectively, while a set of green posts round the circumference of the circle are set with plentiful blooms of some choice variety such as Ophelia, Lady Pirie and Madame Edouard Herriot, one variety only on each post. There has been due consideration of both form and colour in the setting up of these circles, but the even

row of pots containing maidenhair fern which surrounds them is a mistake. Dwarf Polyantha roses, selected with sprays stretching out low and irregularly, would have proved an entirely sufficient and satisfying edging.

Rhododendrons, again, when used alone are not difficult to group aright, and Messrs. Waterer, Sons and Crisp have an exceedingly fine display. Yet even here a little more thought might have produced an even better result. Why, amid the delicate softness of Alice and Pink Pearl, with which Mrs. Holford and Lady Blanche Cathcart associate excellently, need the full, assertive red of Brilliant and Marquess of Waterford be introduced, when these latter would look so well as giving rich warmth to a group of Loder's White, Sappho and Mrs. Tom Agnew. By to a group of Loder's White, Sappho and Mrs. Tom Agnew. By themselves, also, azaleas look well, and blend with little difficulty. So floriferous and bright are they that they even look better when interspersed with the greenery of ferns and maples, as Messrs. Cuthbert have done. But to throw together haphazard the pinks and purples of rhododendrons and the yellow, orange the pinks and purples of rhododendrons and the yellow, orange and red of azaleas is an unexpected falling away on the part of Messrs. Bunyard, who have so well arranged a mass of herbaceous stuff close by. Here the association of Phlox Laphami, Aubrietia, Lavender, Thalictrum dipterocarpum and Pentstemon Scouleri, with Saxifraga pyramidalis and Iberis Snowflake, is good, and joins up well with a bank of irises, while Verbascum densiflorum and pink Japanese pæonies. But it was an error to add and set side by side a brilliant orange Lilium umbellatum and a hot aniline crimson Pæony decora.

umbellatum and a hot aniline crimson Pæony decora.

There are many exhibits of Alpine plants in the great tent well put together, but a wide selection to interest the intending purchaser, rather than an arrangement for effect, has been the main purpose of the leading nurserymen. On the other hand, Sir Everard Hambro's large exhibit has general effect for its principal aim. Two little mounds are set with Japanese azaleas of the dwarf kinds, that associate well with Alpine plants. Their glare of colour is delightfully veiled by a rising mass of the tall stems of Saxifraga pyramidalis, grandly grown. Other saxifrages of the same type, but of more moderate size, carry on this idea of a light veil, and give unity to the mixture of Alpines beneath them such as the silenes the asperulas, the androsaces, the haberleas and the lewisias. It is all very good with one exception. The mounds of azaleas are bright pink androsaces, the naperies and the lewisias. It is all very good with one exception. The mounds of azaleas are bright pink and brick red, and a lot of the hot mauve Primula Veitchii should not have been set all along their edge. A little careful isolation of such tones—too jarring for even the saxifrage veil to bring together—would have made this exhibit a quite striking example of thoughtful grouping.

example of thoughtful grouping.

Form and colour arrangement is but one of the many aspects of the Chelsea Show. But it is important, because form and colour should be at the root of our garden plans and work, and we should look for light and leading from the Royal Horticul-tural Society. It is possible to overdo colour schemes. Flower tural Society. It is possible to overdo colour schemes. Flower tones do associate and blend far more easily than do pots of paint. Yet haphazard carelessness in planting produces many poor and some almost unbearable, results. Form, as the Japanese so well know, is even more important than colour, and is a far wider and more subtle subject of study for the gardener who aims at really first rate outdoor results. Taking it on these aims at really first rate outdoor results. Taking it on these lines, the Chelsea Show of to-day has given me satisfaction and hope, because, with much that calls for adverse criticism, there are many examples of successful effort and a pervading, if as yet undeveloped, sense that more and more attention to form and colour must be paid by all those who exhibit plants in groups.

WILD LIFE IN CENTRAL AFRICA.

Through Central Africa from East to West, by Cherry Kearton and James Barnes, With a colour frontispiece, eight photogravures, and 160 illustrations from photographs by Cherry Kearton. (Cassell and Co., Lim'ted.)

FEARFUL struggle the result of which will decide our future is at present going on at our very doors. It is almost a platitude to say that there remains no corner of the world unaffected, and the great continent of Africa is shaken from the north to the south. For her the result will be stupendous. A bold geographer recently published a map indicating the possible demarcation of international boundaries after a final victory of the Allies. Anyone who wishes to know something of the resources, flora, fauna and attractions of Central Africa cannot do better than procure the volume which has just been issued by Messrs. Cassell and Co. It is not meant for the perusal of the "armed tourist" as are so many books of this kind. It does not deal with hectacombs of slaughtered animals, and for this Mr. Barnes' readers should be thankful. We The Scribe and the have had enough of slaughter. Photographer, to employ the terms used by Mr. Barnes, are good representatives-and the qualification is necessary—of a type of traveller whose numbers have increased of late years. In the hands of such men the camera takes the place of the rifle, and a record of the lives of wild animals the rows of grinning skulls and mounted heads which in other cases represent the completion of a successful expedition. The taxidermist suffers, but at this stage of the world's history the general public are the gainers.

Although the present volume throws but little fresh light on Darkest Africa, its appearance is amply justified by the extraordinarily good series of photographs secured by Mr. Kearton. Incidentally, it may be mentioned that an exhibition of cinematograph films is at present being shown in London from which the illustrations included in the present volume are taken. They are certainly the best of their kind that



A BUGANDA WARRIOR IN HIS WAR PAINT.



BABIRA WOMEN IN THE MARKET PLACE

the present writer has seen. Some idea of the present writer has seen. Some idea of their quality may be gained by the photo-graphs reproduced, such as "Grévy Zebras and Giraffes" (page 30), and "Oryx and Vultures at the Water Holes" (page 32), though, on the whole, the moving pictures are superior to the reproductions. They are are superior to the reproductions. They are not so startling as photographs of lions done to death by a pack of mongrel hounds, cheetahs potted in trees with arrows, or trapped animals poked into agonised action by sticks; but they leave a far more pleasant memory in the mind of the spectator. The leaders of the expedition apologise in the preface for the lack of animal photographs as the record of their journey lengthens, but it is explained by the utter impossibility of obtaining photographic records in thick forest. Consequently, after many vain attempts, the okapi and the pigmies were left in peace. But there is much to atone for this deficiency. Scribe and the Photographer, it may be stated, resolved at the outset "that there would be no wounded, trapped or harassed animals taken, that slaughter would be conspicuous by its absence, and that, so far as possible, animals would be seen moving undisturbed in their natural habitat, and that the native life would be represented unstaged and truthfully." It would be well if certain other travellers, who shall be nameless, had set out with similar resolutions.

The authors also determined to present to the great natural history museums of the world a duplicate set of the pictures obtained to form the nucleus of a film library. The idea is an excellent one. What would we not give now to be able to see the American prairies as they were forty years ago, or the South African veldt as it was in the days of Cotton, Oswell or Harris!

In May, 1913, the travellers skirted the Aberdares bound for the Northern Guasa Ngiro. The Scribe, by the way, adopts certain forms of spelling which seem unorthodox, though variaspelling which seem unorthodox, though variations in African orthography are great. "Abadares," "Rewenzori" and "chigger" (for "jigger") are examples. Many of the pictures of animal life were secured at the water holes in districts inhabited by the Rendili, Samburra and Boran. From here the route lay westward through Uganda, down the Ituri and the Aruwimi to the Congo, practically following from the Mountains of the Moon Stanley's trail on the Emin Pasha relief expedition of 1887. We are already familiar with the methods employed for obtaining photographs of wild animal life, and those adopted in the present instance do not vary. "Hide-ups" were constructed near water holes, gradually, so that their sudden appearance should not alarm the game. are several instructive observations recorded on the animals seen, such as a lion walking within a hundred yards of grazing impalla, which remained undisturbed by his roaring. The baboons, as they usually do, supply the comic relief, and it is worth noting that once giraffes have made up their minds that the coast is clear, other animals abandon their cautious advance and gallop down to the water without further precautions. Two or three encounters with lions are well and graphically described.

Permission to visit the southern game reserve was refused, and the travellers had to resort to a ruse to defeat the red tape which impeded their movements. The construction of a railway to the great Magadi lake of solid soda had caused the game to shift, and no photographs were secured.

One of the most interesting side issues of an expedition such as Mr. Barnes describes is the number of interesting personalities which the traveller inevitably meets. John Boyes, "King of the Wa-kikuyu," is still a young man. The present writer vividly remembers a night in Nairobi seven years ago, when the sturdy little Yorkshireman held him enthralled until the small hours by a simply told epic which might have stood as the foundation of

one of Rider Haggard's romances. He has since published some of his experiences in book form, though, as Mr.

Barnes says, "Some critics have been unkind enough to say he did not tell a half of what he might have told."



ORYX AND VULTURES AT THE WATER HOLES.



GREVY ZEBRAS AND GIRAFFES.

Poor Fritz Schindler, whose occupation was "principally that of risking his life," was another striking figure. Having assisted at the death of perhaps sixty lions, he was fatally mauled by one in January, 1914. "Nairobi by his death lost one of its most picturesque and taking charac-ters." Mr. Barnes gives a very vivid pen picture of his character and personality. He was killed by helping to assist in the taking of a lion-hunting cine-matograph film for an American who holds the unenviable position of having secured "the lion record."

Mr. Barnes has a good deal to say about lion hunting which is worth reading. Charles Malloy, born in 1828, an old "Forty-Niner," was

another character encountered later in the country of the Kabaka of Uganda. The description of this latter ruler's position makes, somehow, rather pathetic reading. The later portions of the narrative deal largely with "canoe life, river and village scenes, with occasional glimpses of the forest." The Photographer had real bad luck trying to obtain pictures of elephants. One big tusker, which had been causing the natives a lot of trouble, was killed by the Scribe, who is at his best in describing the hunt by moonlight. In the great forests of the Congo the travellers experienced that mental depression which had attacked Stanley, their predecessor, twenty-seven years earlier. The gloom was diversified by the song of invisible birds, the flutterings of gaudy butterflies and the overpowering odours of tropical blossoms, but "the ground seemed full of insects, ants and beetles, scorpions and centipedes, and there were many poisonous snakes." Difficulties with unfriendly natives, delays through lack of transport and unforeseen obstacles were numerous. Wisely these are not all recorded. At Penghe was Mr. Reid, who has the

proud distinction of being one of the very few white men to have shot an okapi. The fine male which he killed was given to Dr. Christy, who collects for the Belgian Government and the British Museum. Memories of Stanley's journey are frequent, and more than one native was met who remembered and had travelled with the great explorer.

Central Africa at the present time is cut off from the world in a way that it has not been for years. No steamers run from Antwerp to the Congo, and it is of interest to note that long before war was even thought of the Scribe wrote: "Curiously enough, there are rumours spreading among the natives, especially in the eastern districts, that the conduct of affairs will soon pass out of the hands of their present masters."

We can cordially recommend "Through Central Africa" to all who are interested in the future of that most fascinating of lands. We can sympathise with the authors' feelings when they write, "We are very glad we went, but there are certain portions of the journey that we would not care to do again."

MR. M. B. KIRWAN'S GREAT DANES.

By A. CROXTON SMITH.

LTHOUGH it may be said of many dogs that they are first among their equals, if submitted to the more rigorous test of competition with the cream of other varieties they fail lamentably, not having that superexcellence that singles them out to a remarkable degree. To recall the really outstanding dogs of the last fifteen years, say, would not require any severe mental exertion on the part of one who has frequented the chief shows with any regularity, and it would be found that in the ranks of this aristocracy there would be, perhaps, half a dozen more conspicuous than the rest. One of these, I should certainly say, was Mrs. Horsfall's Great Dane, Champion Hannibal of Redgrave, who had that indefinable air of distinction that immediately captured the eye, making one feel, ignorant though he might be of the specialist standard, that he was in the presence

of a really great dog, judged as a dog and not merely as the representative of a particular breed.

One might not extend this eulogy in its fulness to Mr. M. B. Kirwan's Champion Conn of Cleveleys, illus-trated in this issue, but all the same, one knows of him that he is capable of holding his own in the most select company-or, rather, was a few years ago before advancing years detracted from his liberty of action. Now in his ninth year, he cannot be expected to retain all the vim of youth, but when I saw him at Cruft's in February I could not help thinking how well he was bearing his age. Dr. Morell Mackenzie once remarked of him that he was one of the few Great Danes that have been successful in variety classes. What he has done in his breed section is apparent to all who have followed the Dane judging, and, without going into wearisome statistics. I may just mention that his bag of twenty-seven challenge certificates, two of which were gained under Herr Esser of Cologne and Herr Steesma of Holland, set him in a place apart. He has been shown fearlessly under all judges, from the time he won his first championship at Birkenhead under Herr Esser at the age of twelve months. This expert spoke of him as a wonderful dog, in fine condition, colour and coat, paying him the tribute of saying that if more such were bred the breed would show great progress. Those of us who know how stinting most German judges have been in their praises of British dogs will appreciate this all the more.

T. Fall

PEARL OF ROSSALL.

Copyright.

bone, beautifully clean neck, well chiselled head and free movement are among excellences. added to which he is perhaps the most perfectly coloured fawn that we have ever had. He was produced by the most satisfactory union of colours for obtaining either fawns or brindles; that is to say, the mating of a fawn with a brindle, his sire being Champion Tiger of Cleethorpes (brindle) and his dam Champion Valentine of Highfield (fawn). In this way either marking should be intensified. Brindles bred together gradually become too solid, while the same process followed with

fawns results in a

His short

back, sound

As a matter of fact, if his pedigree is disagreeable yellow. extended more brindle will be found in it than his own colour, and there is also a good deal of harlequin.

It may be asked why this question of colour should be laboured, since make and shape should always stand first. ago. At present at The Towers, Thornton, Lancashire, Mr. Kirwan has about tweaty Danes, several of them of the first At the last Cruft's Show he won no fewer than ten rank. first prizes with Pearl of Rossall, Sydney of Rossall and Melba of Rossall, Pearl gaining the bitch championship. Of her the judge,

Gooby, Mr. wrote: "She has indeed style and quality all through, and would be difficult to find a fault with." Sydney he described as having one of the longest and cleanest-cut heads seen out for a long time. He wants time to fill up in body. Lastly, for Melba he "The had high praise. winner of the puppies had an easy win. is well matured for her age, and shows wonderful strength of muscle, bone, and If she can quality. retain it she will make a big name, and that right soon." There were all bred by Mr. Kirwan, the two young ones being by Mr. A. T. Walker's Major of Ansdell, who was by an imported sire.

I asked Mr. Kirwan to explain the secret of his success, and he

sums it all up in two or three words—taking great care of his dogs by feeding and housing them well, and exercising on hard roads. He is a firm believer in the virtues of a carnivorous dietary, allowing each inmate of the kennel five pounds of meat a day.



HEAD OF CH. CONN

Well, a few years ago, our leading breeders, considering Danes had improved so much all round in general appearance, felt the time had come for putting more emphasis upon a point that undoubtedly does add very much to the looks of an animal.

Supposing Conn had been a nasty, dirty yellow, can we imagine that he would have filled the eye in the same manner? One may note, too, material a difference the distribution of the splashes makes to a harlequin, even a firstclass animal appearing commonplace with certain markings. Apart from this, putting aside any merely finicking exactions, it may be said that anything that makes breeding more difficult adds to the zest of the pursuit. Were all plain sailing, breeding champions would be as easy as shelling peas, and interest would die of surfeit.

Mr. Kirwan may be deemed fortunate at having bred Conn in his early Dane days. I cannot say how long he has kept them, but his first attempt in the show ring only goes back

some eight years, which practically synchronise with the career of his famous dog; but it was not long before he became a power in the land. I take it that he was not altogether a novice, for, when living in Australia, he had greyhounds many years



HEAD OF SYDNEY.

Copyright

While upon this subject it will not be inappropriate to relate a story told by Dr. Morell Mackenzie in his monograph on the breed. "Quite recently I have met a Great Dane belonging to Mr. Kirwan, which, though it is not, I am sure, what he would consider a show specimen, is remarkable for its intelligence. In addition to doing all the customary tricks, and many that are out of the ordinary, it is quite impossible to keep the dog in a room unless the door is locked. He will take the handle of any door in his mouth and turn it, as I have seen myself. It is easy to imagine the astonishment his appearance has caused on more than one occasion after he has been shut up, not only in a room, but in a house which has had its doors all shut securely."

It is often supposed that big dogs have not the mental alertness that is common to the smaller breeds when brought into close association with human beings, but Dr. Mackenzie tells us enough to demonstrate the cleverness of the imposing creatures of which he was so fond. One of the best anecdotes I have read is concerned with a brace of Dane bitches, which struck up a firm friendship They lived with others in kennels together. opening upon a large yard used in common. At feeding time the troughs were put down in front of each kennel. Alpha, who had a healthy appetite, was in the habit of clearing up the platter of her friend Beta, who was less greedy. This was allowed for some time until it was seen that extra rations were making her more suited for Smithfield than the show ring. Consequently, she was chained up at meal times. In spite of this she continued to do herself too well, while Beta, the dainty feeder, suddenly developed an appetite that caused her to clear up her allowance instead of leaving a portion. Becoming suspicious, the owner watched one night, and much to his amazement, saw Beta carry her trough of food to Alpha's kennel, share the contents with her, and then carry it back empty.

This is capped by another story, the authenticity of which is vouched for and, I hope, therefore it is true. Anyhow, it deserves to be. At a certain convent in France dinners were given to twenty paupers daily, a performance that was always attended by the Great Dane of the establishment, for the sake of the bits that were thrown to him. The procedure followed was in this manner: As a poor man came in for his dinner he pulled a bell, and a brother inside placed his portion in a revolving contrivance known as a "tour." Having watched this process for some time, the dog decided to try his luck, and one day, after the recipients of the charity had finished, he rang the bell and took the resultant food from the tour. This went on until the cook discovered that twenty-one dinners were being served, and the imposition was then detected.

Mr. Kirwan's remarks about the quantity of meat given to his dogs may alarm some people who contemplate setting up a Great Dane as a part of the establishment, and to reassure them let me say that in most households of any pretensions enough table scraps usually remain to form a substantial foundation. Meat, fish, vegetables, crusts of bread, milk puddings, etc., all constitute a savoury mess that is much relished, to which sound biscuits may be added as a makeweight. At a pinch, biscuits or hound meal alone will suffice. Scraps may usually be had very cheaply from the butcher, and sheep's paunch, well cleaned, though of less feeding value than beef or mutton, makes a decent occasional substitute. It is easily digestible for any dog that is off colour. Bullock's paunch, of which tripe is made, is superior, but cannot always be had; it should be gone over carefully, as nails, rusty wire and other substances are often found embedded in it.

More meat is needed to build up the frame of a puppy than is required by an adult, with the consequence that of the two the former costs more to keep. While one meal a day suffices for the grown-up, the youngster will do with three or four, according to his age.



SYDNEY OF ROSSALL.



MELBA OF ROSSALL.



T. Fall.

CH. CONN OF CLEVELEYS.

Copyright.

IN THE GARDEN.

By W. J. BEAN.

NEW AND RARE RHODODENDRONS.

HODODENDRON SPINULIFERUM. - Both in the shape this is one of and in the colour of the flower, this is one of the most remarkable of the Rhododendrons. As will be seen by our illustration, the corolla is tubular, and the lobes, instead of expanding at the top into an open bell-shaped or trumpet-shaped mouth, an open bell-shaped or trumpet-shaped mouth, close in on the protruding stamens. The flower is a bright red with a suggestion of scarlet in it. It was originally discovered in Yunnan by the Abbé Delavay, and was introduced to this country from France in 1910. It will probably be too tender for any but the southern and western parts of our islands, but is succeeding admirably with Mr. J. C. Williams at Caerhays. It is said to become 8ft. high. The young shoots are covered with a fur of short hairs and bristles; and the leaves, each 2in. to 3in. long and 1in. wide, are of hard texture, scaly and hairy beneath.

2in. to 3in. long and 1in. wide, are of nard texture, scary and hairy beneath.

R. flavidum.—If readers will imagine the flowers in our illustration to be of the softest primrose yellow, they can perhaps conceive the dainty beauty and charm of this Rhododendron. Its habit is as dainty as its blossom, for it grows only 2ft. high, and its leaves are only half an inch to 1in. long and a quarter of an inch or a little more wide. The flowers themselves are 1in. to 14in. across, their margins prettily waved. themselves are iin. to ilin. across, their margins prettily waved. It has been about ten years in cultivation, but still remains one of the rarest of Chinese species. The foliage is covered with minute golden yellow scales, and has a pleasant aromatic scent when crushed. Yellow - flowered Rhododendrons are so uncommon that they possess a particular value and interest.

Next to R. campylocarpum—a shrub of an altogether different type—I think R. flavidum has the greatest attraction of any

R. ambiguum has yellow flowers too, but they are of a less pleasing shade than those of R. flavidum. The shrub itself is much more vigorous, and will become at least 6ft. high, its leaves 2in. to 3in. long and half that width. It promises to grow well in our climate, but the flowers, through

promises to grow well in our climate, but the flowers, through opening in April, are liable to damage or even destruction by untimely frost. Wilson introduced it from Western China in 1904 and several times since. The flowers are each about 2in. wide, and five or six of them are in a truss.

R. moupinense.—The photograph of this new species now reproduced was taken on February 16th, and in that early flowering lies at once its greatest charm and its weakness. Flowers in the open air are so precious then that many people probably would grow it for its early blossoms alone; but their tenure, of course, is precarious, and anything over five degrees of frost would destroy them. This disappointalone; but their tenure, of course, is precarious, and anything over five degrees of frost would destroy them. This disappointment one must always be prepared for. The species is a dwarf one. It was introduced as lately as 1909, but flowered when four years old and only 4in. to 6in. high. Its height in the adult state is given as 2ft. to 3ft. The flowers, pure white with purple spots, are unusually large for so small a shrub, and they measure fully 2in. across. The plant seems well adapted for a nook in the rock garden, more especially for a position facing west and shielded from early morning sun.

R. racemosum.—At the time of writing—early May—there is no Rhododendron from Western China that gives



Rhododendron moupinense, a dwarf early flowering species with large white flowers



Rhododendron rubiginosum, a West China species with rosylilac blossoms



Rhododendron yunnanense. This has blush pink flowers, which are produced in abundance.



Rhododendron ambiguum, a yellow flowered species from West China.



Rhododendron Vaseyi. This is a native of North Carolina. The flowers are pale pink and the plant is deciduous.



Rhododendron spinuliferum, with curious-shaped bright red blossoms.



E. J. Wallis.

Rhododendron flavidum. This has soft primrose-yellow flowers and scented foliage.



Rhododendron racemosum. The flowers are pale rose.



Rhododendron rhombicum, a deciduous species from Japan. The flowers are bluish purple.

so bright an effect in our gardens as this does. It has been introduced long enough to have been propagated in sufficient quantities (either seeds or cuttings may be used for the purpose) to plant in broad groups, and very effective its profusion of blossom makes it, grown in that way. As our illustration very plainly shows, the most striking peculiarity of this species is in bearing flowers in the axils of the leaves as well as at the ends of the shoots, to which in most Rhododendrons the flowers are confined. This characteristic is found in other kinds, but in none is it so marked as in R. racemosum, which has often more than 12in. of the terminal part of its shoots carrying flowers. These are 1in. to 1½in. wide, usually six to ten in a cluster, varying in hue from a pink-tinged white to pale rose. The shrub itself is growing much higher than it was thought likely to do when first introduced in 1889, and plants are now 6ft. or 7ft. high.

thought likely to do when first introduced in 1889, and plants are now 6ft. or 7ft. high.

R. yunnanense was obtained from that province of China, from which it takes its name, about the same time as R. racemosum, having been first sent to the Jardin des Plantes at Paris in 1889. It is certainly one of the most attractive of all the Rhododecdrons of Western China, and flowers about three weeks later than R. racemosum. No Rhododendron covers itself more completely with blossom, the colour being a blush pink with brownish crimson spots on the upper side of the corolla. Like so many other species from the same region, it varies in depth of tint, also in profuseness of spotting. When a good form has been secured it should be multiplied by means of cuttings, which, taken when they have become firm (say, early August), strike readily in gentle warmth. I have never known it to really suffer from even extreme cold, but it loses much of its foliage in hard winters. Both Wilson and Forrest have sent home seeds. It is said to become ultimately 8ft. to 10ft. high.

home seeds. It is said to become ultimately 8ft. to 10ft. high.

R. rubiginosum.—This was one of the earliest of Rhododendrons obtained from Western China, and seeds of it were sent to the Jardin des Plantes at Paris by the Abbé Delavay as long ago as 1889. It is one of the great group, distinguished by having the leaves and young shoots covered with

reddish scales, which has been recruited so abundantly in latter years from the same country. It bears a strong resemblance to R. punctatum, a species introduced from the eastern United States 130 years ago, but is a stronger grower and has larger flowers. The latter are 1½in. to 2in. across, rosy lilac, spotted with brownish red on the upper side. They open during the second half of April, and remain in beauty for three weeks or so. It grows about 6ft. high.

so. It grows about off. high.

R. Vaseyi.—The mountains of North Carolina have yielded some of the most beautiful shrubs of our gardens. It was there, on Balsam Mountain, that Mr. G. R. Vasey found this beautiful Azalea as recently as 1878. When one remembers that this region has, off and on, been the happy hunting ground for plant collectors for more than 200 years, it may seem strange that so striking a shrub should so long have escaped detection. But the world is large, and some plants have a very restricted habitat. R. Vaseyi is deciduous and belongs to the Azalea section of the genus. It blooms in early and mid May, each flower being 1 lin. wide and of a pale clear pink, in some forms almost pure white. The narrow, pointed leaves are 3in. or 4in. long. Introduced in 1891, it has existed long enough in our gardens to establish its claim to perfect hardiness.

gardens to establish its claim to perfect hardiness.

R. rhombieum.—This is one of the Azalea section of the genus, and is deciduous. It flowers towards the end of April, and, being quite leafless then and rather thin in habit, it should be planted in association with a dwarf evergreen, to give a setting for its blossom. Except for a near ally, R. dilatatum, its flowers are quite distinct in hue from those of any other Azalea, being purple with a distinct leaning towards the blue side of the colour scale. They are sometimes in pairs, more often solitary, each one about zin. wide and opening almost as flat as a Pansy. The leaves also are distinct in their broadly lozenge or rhomboid shape. A native of Japan, it produces seed in plenty and is perfectly hardy when once established; but seedlings up to two years old require a little protection if the winter be hard. I have found it best to plant them in a cold frame until they are, say, oin, high.



HE chalk regions of the South of England are planned like the imprint of a huge bird's foot. Three claws, as it were, rooted at Salisbury Plain, spread out eastward to Norfolk, North Kent, and Sussex, while a shorter spur juts south-westward from the same centre into Dorsetshire and almost to the Channel sea. In a wooded, grassy hollow in this fourth spur, a hollow that droops towards the south from the crest of the ridge, Milton Abbas lies, a wonder of beauty in a setting of fair lawns and sloping forest. Much, indeed, does the cluster of building owe to the forms of Nature that enclose it, so that one is tempted to exclaim, "How well the old monks knew where to place their fanes!" Yet truth to tell, it was not choice of theirs, but the admirable taste and enterprise of an eighteenth century proprietor, that provided the setting to

which the abbey owes so much of its charm. In Buck's view of 1733 the house is shown in the midst of bare downs, itself as bare. It was the Earl of Dorchester who planted the hills when he built the new house in 1771, foreseeing, no doubt, the glory which we can behold to-day, but which he could only grasp by the eye of faith. Of all the unpaid gratitudes that have been earned in the world, the commonest, the most due, the least rendered are, perhaps, those deserved by the planters of trees. The least we can do is to recover their names, when possible, and hold them in such reverence as may encourage our own contemporaries to follow their example.

Owing to their relative dryness and the absence of impenetrable forest the chalk uplands in ancient days were the natural home of pastoral people, and over them lay the

routes of moving armies and bodies of men; hence number of earthworks hence the deeply worn tracks still dis-coverable on them. There are several most ancient forts, or enclosures, on the top of the downs above Milton, and there is one, not unimportant for us, on the hillside a hundred feet or so above the site of the abbey itself. It is just possible that this enclosure may have had something to do with the foundation of the religious house. Legend, at all events, states that one night when King Athelstan was sleeping here on the festival of St. Sampson, it was foretold to him in a vision that he should obtain a great victory over Scots and Danes, and that in consequence, after the Battle of Brunenburgh in 938 (or 940), he founded this abbey in thanksgiving, the still existing chapel of St. Catherine, which actually stands within the earthwork being erected on the site where the vision came to him.

Another story relates that he founded the abbey in penance for having been the cause of the death of his brother. In any case, all the early authorities unite in calling Athelstan the founder of Milton, and a charter of Henry I recites and confirms his donation. Of course, nothing remains of any building of his date. Fragments and foundations of Norman times have been excavated, and there are Norman doorways remaining in St. Catherine's chapel; all else existing above ground is no earlier than the fourteenth century.



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ENTRANCE TO COURTYARD.

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THE HALL: SOUTH END.

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Why the chapel should been dedicated to St. Catherine is not recorded. It stands on high ground far above the abbey, high situations being apparently preferred for churches dedicated to that saint, who was buried by angels on a mountain top, as the legend records. Evidently the chapel was an important historical or religious feature, for the abbey church is built in alignment with it. Nowadays its im-portance is æsthetic. It commands a superb view, looking down on the abbey in the foreground and away off over garden and woods to a fair and wide-extending prospect. A remarkable staircase of some two hundred grasscarpeted steps leads up to it between yew hedges flanked with shady stretches of wood. Nothing could more admirably attract attention to it from below or more certainly invoke in the spectator a desire to mount to it.

Not so long ago the poor thing was utterly neglected —used as barn, cottage or pigsty, I forget which. It has now been carefully repaired and restored to religious uses. Unable as I was to



Copyright. AN XVIII. CENTURY CHAIR.

obtain entry to it, I can only cite as interesting surviving features the two Norman portals and the ancient inscription beside one of them recording ten days' Indulgence which a pilgrim may, I suppose even yet, obtain by visiting it. The chancel arch within is stated also to be of Norman date.

The architectural history of the abbey church begins with a fire, caused by lightning, which destroyed its predecessor in the year 1309. Rebuilding operations seem to have been begun at once and carried actively forward, so that most of what we can now behold dates from the reign of the second and third Edwards. The north transept and the tower were added later in the Perpendicular style, while a number of minor additions and repairs were made by Abbot William Middleton (apparently pronounced Milton), who was in office from 1481 till 1525, when he resigned. He also built the great hall of the abbey—to be described presently. His successor, Abbot John Bradley, surrendered the house and estates on the Dissolution, March 11th.

"C.L"



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THE SALOON.

1539, having been consecrated Suffragan Bishop of Shaftesbury in the previous year and receiving besides a pension of one hundred and thirty-three pounds six shillings and eightpence. The pensioned monks for the most part retired to the Universities, there to await benefices.

The buildings of Milton Abbey were unusually lucky at this perilous moment, escaping as they did the period of suspense of individual ownership during which most few years after they had been built. That such was not the fate of Milton is due to one John Tregonwell, of Cornwall. In his day he filled many parts and was busy with many activities. He was principal of Vine Hall, better known as Peckwater's Inn, now incorporated in Christ Church College, Oxford. He was one of the King's Proctors at the hearing before Cardinal Campeggio concerning the divorce of Catherine of Arragon. He was much employed by the King throughout



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THE HALL SCREEN.

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English abbeys were irremediably ruined. As a rule, when an abbey had been surrendered the buildings, or such parts of them as were saleable, were immediately sold. The lead was peeled off the roofs and melted down and the stone walls were pulled down piecemeal and the materials used for new domestic buildings somewhere in the neighbourhood. In this manner most of the abbey churches, cloisters and monastic buildings were cleared away, some of them only a

this prolonged suit, and was sent abroad in 1530 on the same business. When the proceedings were terminated he was rewarded with a pension of forty pounds a year, and other pickings. Later on he became "chief judge of the Admiralty." In 1538 and the following year he was one of the Commissioners to receive the surrender of religious houses, and it was in this connection that he became acquainted with Milton Abbey, and marked it down for his own. It appears,



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CHAPEL OF ST. CATHERINE.

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LOOKING UP STAIRWAY TO CHAPEL.

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in fact, to have been granted to him in exchange for a mere thousand pounds on February 23rd, 1539, sixteen days before it was surrendered by Abbot Bradley.

Thus there was no perilous interregnum. The buildings passed intactinto his hands, and escaped injury, while the abbey church was transferred to the parish and was used as Parish Church till 1786, when Lord Dorchester built a new church in the village and reunited the monastic church to the house which replaced the monastic buildings. Notwithstanding Tregonwell's anti-ecclesiastical activities, he remained unmolested in the reign of Queen Mary, was even knighted by her, and became Member of Parliament and Sheriff for his county. He died, full of wealth and honours, in 1565, and was buried at Milton.

In Hutchins' "Dorset" it is

In Hutchins' "Dorset" it is stated that "there was formerly in the oriel at Milton an original picture of Sir John on panel by Holbein, in his doctor's robe and cap in a very studious and thoughtful attitude." It was inscribed with the words, "Nosce Teipsum A D 1535 Anno vero actatis 23" (? for 32). It was purchased by "R. Browne of Frampton, Esq." About this picture the authorities on Holbein are silent.

The Tregonwells remained

The Iregonwells remained proprietors of Milton and its manor till the end of the seventeenth century, when an heiress married Sir Jacob Bancks and conveyed the property to him. He was by birth a Swede, whose uncle came to England as Ambassador in 1681, and young Bancks with him as secretary. He was employed as a naval officer in British men-of-war from 1691 to 1696, in which latter year he married the heiress and retired to Milton. He was knighted, became Member of Parliament, and finally died in 1724, being succeeded by his second son Jacob, who followed him likewise in his offices and honours, dying thirteen years later unmarried and intestate. Thereupon much litigation ensued between the heirs at law of the Tregonwells and the Bancks.

and the Bancks.

The successful, but probably impoverished, suitor sold Milton in 1752 to Mr. Joseph Damer, who was created Lord Milton in 1753 and Earl of Dorchester in 1792. The Damers were a family of Norman descent long settled in the counties of Dorset and Somerset. As we have already noted, and must presently observe in greater detail, it was this first Earl of Dorchester who built the existing house and laid out the park with its ten miles of drives and other magnificences. With the second Earl the title became extinct in 1808 and the estates went to the second Earl of Portarlington. Lord Portarlington, in 1852, removed many of the treasures contained in the house to his Irish seat, Emo Park, and sold Milton to Charles Joachim, Baron Hambro of the Kingdom of Denmark, to whose third son, Sir Everard Alexander Hambro, K.C.V.O., it now belongs.

From the foregoing paragraphs it results that the existing buildings at Milton represent three important periods—the reigns of Edward III, Henry VII and the early part of George III. It will be best to consider them in this chronological order. About the beauty of the church there

of the best early English. The tracery is agreeably simple, but of excellent pattern, especially in the case of the high placed dwarf east window, seen from within above the lofty reredos. The fifteenth century builders of the south transept and tower closely adhered to the general design of the Edwardian architect, contenting themselves with the employment of Perpendicular detail and the introduction of a vast and splendid south window, flatter in effect and less deeply



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TWO LOWER FLIGHTS OF GRASS STAIRWAY.

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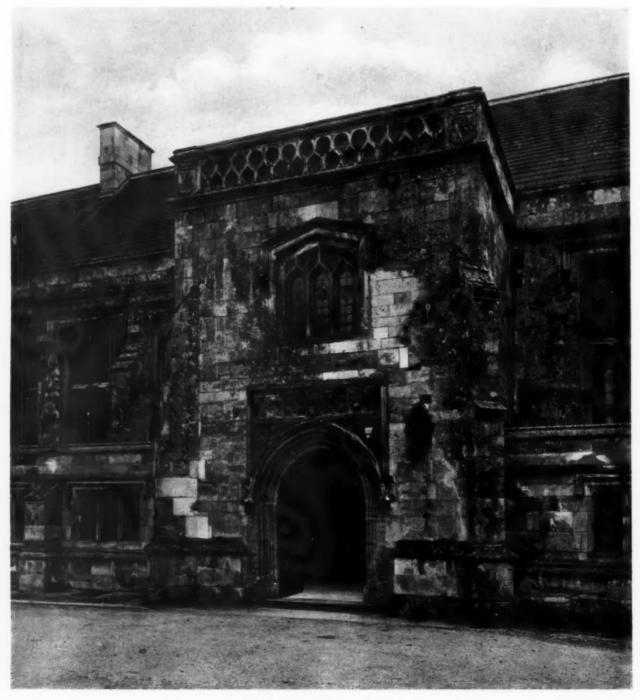
can be no two opinions. The exterior is singularly dignified, simple in outline, fine in proportions and mass, and admirably crowned by its four-square tower. Delicate flying buttresses lean against the walls of the choir. At the east end remains, as it were, the imprint of a vanished Lady Chapel; against the north wall that of the cloisters. The form of the windows and other openings retains much of the purity of outline

moulded than those of the choir, but entering harmoniously into the general design. A parapet pierced with quatrefoils crowns the walls of transepts, tower and aisles, and assists to produce the integral unity of effect to which the building perhaps owes its chief intrinsic charm.

As the church has passed through the restoring hands of both Wyatt (in 1789) and Sir Gilbert Scott, it is probable

that many an ancient detail has been swept away; but if we confine ourselves to a judgment of the present effect of the building as it appeals directly to the eye, there can be no denying that this is fine both without and within. It is evident that a clearance was made of some monuments, and that others were rearranged, which is to be regretted; but from any point of view the noble, spacious interior fills the eye with delight, and what more need we desire? The vault of the crossing somewhat resembles that of Sherborne and contrasts admirably with the simple groining of the choir. It is only when you face eastward that the towering reredos with its triple range of elaborately canopied niches for sculpture

The old stone choir-screen has been largely rebuilt and a new wooden gallery erected on the old canopy that jutted out from it on the east side. Two old canopied stalls have been re-erected against the screen in the positions occupied by abbot and prior, and under the canopies have been set two much-restored fifteenth century pictures representing respectively Athelstan as donor with an abbot kneeling beside him, and his Queen with hawk on wrist. The wall behind the replaced lateral stalls has been pierced with a modern arcading for practical purposes of congregational worship. The ancient carved pulpit is gone: it was sold in 1743 to the church of Winterborne Whitchurch. Gone also is



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PORCH IN INNER COURT.

COUNTRY LIFE.

filling the whole breadth of the central aisle, a sculptured tomb canopy on one side and the richly decorated sedilia on the other, strikes a note of richness that gains full value from the relative plainness of all the rest. This great reredos, which was saved by burial under plaster from Cromwellian fanatics, reminds one of that in New College Chapel at Oxford, save that all the niches have been allowed to remain empty of statues as the Reformation left them. Traces of painted and gilt decoration are discoverable on the lowest tier and over the doorways at either end which admit to a narrow passage-place just at the back of the altar.

the font, but no further than the neighbouring parish church, which also shelters the remains of a theological library left to it by one of the Tregonwells in remembrance of his having as a child fallen unhurt from the abbey roof to the ground, where his nurse is said to have found him, not dead, but plucking flowers. Restorers and writers have left accounts of various remains of paintings and painted decorations with which the church was richly endowed. These seem to have been for the most part of late fifteenth century date. Thus the reredos was decorated by Abbot Middleton and Master T. Wilken in 1492. The pulpitum was adorned with eighteen panels, each about four feet high,

containing a figure of an apostle or saint. The twelve apostle figures were carried off to the chancel of Hilton Church in 1774, where they are still kcpt. Numerous wall-paintings are recorded, but none survive.

One very interesting and rare piece of church furniture has been preserved, not indeed in its proper place, but fastened out of harm's way high up on the west wall of the south transept. This is an elaborately constructed Gothic canopy, said to have belonged to the tabernacle for containing the Host. Visitors to Nuremberg will remember Adam Kraft's elaborate "Sakramentshaüslein" in that city. The Milton example is thought to be of that kind, though much simpler, and of wood. Pyx-tabernacles are rare in England. There is one in Tewkesbury Abbey Church, and another, likewise

of wood (of c. 1280), which belongs to Wells Cathedral. Some antiquaries, however, hold that this Milton canopy had nothing to do with a pyx, but that it may have contained a bell or served some other unidentified purpose. A correspondence on the subject was carried on some years ago in the Antiquary. It should not be forgotten that the hook to which this canopy was originally lastened still remains in the wall close to the high altar.

Of sepulchral monuments there is not much to be said. There is the altar-tomb of an unidentified knight, with the arms of the Latimers. There are the matrices of several monastic brasses. The burial-place of Tregonwells and Bancks was in the north aisle, and there are several monuments relating to them.

MARTIN CONWAY.

WITH A MOTOR AMBULANCE IN FRANCE.

BY HOWARD PEASE.

HERE are certain places along the firing line in France and Flanders where there is practically no shelter from German shells; hence those ambulances which go to the front in these areas to pick up wounded for the field hospitals have to be driven by unmarried volunteers, so dangerous is the service.

But away from the firing line the chief danger lies, so I at least found, in a bad driape (skid) or a collision with a mighty fourgon or camion upon the greasy road. A line of les autobus—Dreadnoughts of the road—or a long series of the supply service fourgons—Packards from America—are a true "Clear the causeway."

The following is an account of the longest and roughest day the writer had during nearly seven weeks with his motor ambulance in France. He was stationed with others in a barracks—now turned into a huge hospital—and was assisting the Santé

Militaire of one of the French armies. Starting early. some time before 7 a.m., our way lay along one of the great white roads of France. still in wonderfully good order sidering the traffic and the fact that the tide of the great battle of the Marne surged across it last September. The weather was unpropitious, and

frequent rains had turned the white dust into greasy, argillaceous mud. Once off the crown of the road the motor skidded this way and that, like a raw skater, upon the slippery edges, and could only climb back again upon the centre by slow degrees. Up a long incline the motors followed each other, up and on to the wide rolling spaces which were covered with farspreading tillage and growing corn. Had it not been for that, one might have thought one was travelling upon the Wiltshire or the Sussex Downs. We passed through many villages which all bore the trade mark of the Huns in their wrecked churches and their burnt and gaping houses. One can, indeed, track the Hun by the devastation he has caused, even as the hunter tracks the elephant through the broken forest.

And the pity of it all! The senseless fury of the Hun has accomplished nothing, for the ruined villages will all be rebuilt in time.

As we went ahead we gathered from the sights and sounds about us that we were approaching the war zone, for we soon passed pickets of men and horses, and each village we passed through was full of supply wagons and streams of soldiers, mounted and unmounted, either coming back from the front for rest or going thither to fight afresh. As we passed through and our khaki overcoats were noticed, smiles of welcome, brotherly salutes, and cries of "Il y a des Anglais. Vivent les Anglais!" welcomed us warmly. Responding in turn, we wended our way through the turmoil of the preparations of war, and on and into the town where are the headquarters of the Army of the white and red drapeau. Thence onward slowly northward to a little town full of the picturesque Chasseurs d'Afrique with their beautiful Arab horses.

Here we halted for fresh instructions, and were informed that each ambulance should keep rooyds, behind the one in

front till our destination was reached, for there was a danger of les Boches shelling the convoy. Pricking our ears at this, we went: forward very expectantly, in and out of horse, foot and supply wagons that thronged the road that led through the woods of the Argonne, wherein les Poilus were living like Troglodytes of some 5,000 years ago.



WITH THE SANTE MILITAIRE: THE MORNING TOILET.

Passing through this natural forest, we emerged upon an open level road which stretched for some three-quarters of a mile free of cover to a wooded hillside, under which was the village with the *Hopital d'evacuation* whither we were bound.

There was no sign of any hostile presence, nor any warning noise, when suddenly—just as one was turning the corner into the village—an angry roar broke out above one in the sky, and the white breath of Death's messenger hung in the still air. A clatter of slates followed, for the shell had gone through the roof of a building some 3oyds. away. Pretending to take no notice of this, onward we went, the motor of le Médecin Chef in front, the writer's ambulance coming next. We drew up near to the little hopital, and waited in suspense for any further attentions from les Boches, who were entrenched on the crest of the hill above, among the spruces, some 700 metres away.

We had not long to wait. Another angry roar to the right of us and a fragment of shell hit the dust in futile rage 25yds. away. One began to feel uncomfortable; to wonder, as the bank cashier says, "how one would like to take it," whether



"TAKEN IN THE VERY NICK OF TIME, AS THE SHELL BURST."

in the leg or arm, and what part of one's self one could best dispense with. One was not, however, put to this final test, for after another roar or two, as of lions retreating, les Boches gave up further attempts upon our Red Cross convoy. As that particular village had not been shelled for some time previously, some thought that the Germans were afraid of a surprise being sprung upon them; but the writer believes that they were but following the advice of James Pigg, the immortal North Country whip, and doing their best to "keep t'owd tambourine a-rowling," by shelling a Red Cross convoy when they had the chance.

The "tyranny" of shells being then "over-past," we filled up our ambulances, bade farewell to our new-made friends and set off homeward for our hospital, some forty-five miles away. Now, to drive an ambulance with four wounded on the stretchers—which weighs in all, with the driver and a companion, some two and a half tons—on a greasy road with yawning ruts that cannot altegether be avoided when lurching jourgons and heavy supply carts take the crown of the causeway, is a very trying experience. Even with an engine of quarante chevaux you cannot go faster than eight miles an hour; the radiator begins to boil; an unlucky bump may cause the poor victims within to cry out, and yet you must proceed, for there is still a danger of shell fire.

On our way back an "Aviatik" soared above, and one saw les Poilus running about and endeavouring by a lucky shot to bring it down. It reminded one a little of the moors at home, when, perhaps, on the way back from the butts a high-flying blackcock comes over, and one and all fire in the vain hope of bringing him to earth.

The sous-officier shortly after this took the wheel, and his companion noticed that the nut which holds the bolt of the spring and side member had come off on the jolting road. Pointing this out to the driver, with all the possible consequences if the bolt gave way, the writer insisted on stopping and screwing on a fresh nut.

"No matter, no matter!" cried the Frenchman, with all the élan of his country; "I will watch it." But his companion from the colder North looked upon the yielding bolt with more anxious eyes, and finally—without endangering the enlenic cordiale—the ambulance was stopped and a new nut was carefully fitted on.

We were now out of the dangerous zone and clear of the traffic of the war, and so could increase our speed without hurt to the blessés inside. Dusk had come on, and it was just lighting-up time when we stopped beside the Hopital Central with our precious burdens safe within, after a twelve hours' day and some ninety miles of difficult driving. The ambulance curtains were swiftly unbuttoned, the stretchers lifted out by the orderlies and surgeons, and the wounded were at once carried into the undressing tent and handed over to the skilled and kindly hands of the trained nurses.

One cannot admire the French too much. They have been bullied and cowed by the Germans for the last forty years; they began the war by making serious mistakes, as the French Résumés have acknowledged openly; but their courage never sank under the great leadership of notre Joffre, père Joffre, and at Les Eparges, Hartmannsweilerkopf and clsewhere they have proved their superiority to their ancient enemy.

The entente cordiale is now a frank camaraderie, and one good result of this terrible warfare will be, one hopes, that it will extend through all the nations that have taken a hand in putting down the tyranny of les Boches.

The two accompanying photographs were taken—the second in the very nick of time, as the shell burst—by Dr. Ogilvie, who was in the ambulance following the writer's.

EDUCATING GIRLS FOR COUNTRY LIFE

BY ELIZABETH S. HALDANE.

HE war will have taught us many lessons, but none more emphatically than this, that we must see to the education of our young people far more seriously than we have done before. And by education I do not mean book-learning only, but the training that makes us all-men and women-good citizens We who live in the country and have the of the State. management of rural schools did not in the least realise how we have neglected our duties until we saw that our men were being called away and we had not educated our women to take their places. What have we thought of the future of our girls? A few go to secondary schools and make their way into the teaching profession; many go into service or similar manual work. But the land is there to work on, and we do not trouble to show our boys and girls how to make it a source of interest and profit, but encourage them to speed off into the great cities. Things are better as regards women's labour in the North in some respects. The idea of a man being a milker is in these parts greeted with the same benignant smile that would cross the face were it to be suggested that the man should sometimes mind the baby. But then, we do not tell the girls the wonderful interest of dairy work and, above all, why cleanliness is absolutely essential, nor teach them the more difficult matter, how it is to be attained.

Things are beginning, of course. Admirable lecturers are sent out by the agricultural colleges, and it is remarkable that these classes are almost always well attended, especially in recent years. But then, they are not nearly sufficient. The lecturer gives excellent lectures, with practical work in butter making, and the butter in the district rises in standard for the time being. But milking and the care of the cow is a more troublesome business to tackle, and it is seldom attempted; so that, except in selected farms, the old rule of thumb methods still obtain and the cobbled cowsheds accumulate the dirt which cannot be washed off, and the cows are seldom groomed, so that the milk is well mixed with sediment. Something much more thorough, which would lead to cooperative milking schemes and much saving of labour, would soon be desired were we half serious about it, and did we

realise the value of a self-respecting, healthy country

Poultry rearing is another subject for classes; but here again, valuable as the classes are, they are perforce too theoretic. The country school might well have its own poultry run, where the children could be practically taught to keep the sheds clean, and enlightened on the principles of selection and breeding that are so much neglected.

Gardening has made great advances of late years. Most of our village schools in the North have their gardens, and the hours spent in them are among the happiest both for boys and girls. I believe they learn much more there than from any number of lectures. A garden I have in mind is a model one, where each child has its plot and where the vegetables are used for the midday bowl of soup. The girls are the keenest gardeners, the teacher tells me, and this surely shows that here is a profession to their hands. Except occasional trenching work, the big boys and girls do all the work, and even partially make and paint the railings and keep the paths. The boys, too, make the frames in their workshop. The older folk shake their heads over "lessons" being conducted in this unorthodox way, but the master points to the calculations necessary in measuring the ground, to the records of rainfall and temperature, mathematically exact, and the interesting diaries recording the work done, and surely that counts in real education and even in book-learning.

I know a capital young "forestress" who, after learning gardening, begged to be allowed to attend the forestry lectures with her father, and there are some possibilities for women here, though, naturally, limitations also. Perhaps the same holds good for bee culture.

But let us face the question of women's work, and see that we prepare the way for that work to be accomplished. And though farms for apprenticeship and technical colleges are most desirable, let us make our beginnings in the common schools. It is there that we should lay the foundations for all future work. If no direction is given to the children's thoughts in youth it is not likely that they will take to rural pursuits later on. And if farm work is looked down upon as inferior to other occupations, you will not get the best material to work on. It must be made clear that brains are required here as much as elsewhere; that accounts must be kept with accuracy; that scientific knowledge is wanted; and that the slipshod here will fail as certainly as will the careless business man or woman who thinks knowledge of that business a superfluity. And do not let us think that we shall achieve our objects by taking the children away from school too early. They will then be set to jobs that probably teach them nothing useful and very often are too hard for their physical powers. Let us rather see that their last year at school is one that will prepare them for their future lives as they ought to be prepared.

THE FLEMISH SYSTEM OF POULTRY REARING:

SCIENTIFICALLY IMPROVED .-- IV.

BY BELLE ORPIGNE (FORMERLY MADAME B. ALBERT JASPER).

profit being our object, we cannot afford to keep our pullets as they are generally kept on the English system. The "hardening off" of chickens so much advocated by experts and breeders in this country is very good as far as production of breeding and laying stock is concerned. We apply it also, but begin it a little later. For the production of table birds, muscle, stamina, vitality and hardness are not sought; they do not produce the same soft and juicy meat. The hardened birds have not the same propensity to make white, tender and fat flesh, which is what is required, and we shall see later on how false, impracticable and absolutely contrary to common-sense and logic is the English method, where quality of meat and profit are the principal objects to attain.

The English way of scattering about numbers of little coops or brooders on the wet and cold grass in winter is impracticable for commercial purposes, as is also the custom of permitting the chicks to sleep in little heated in which there is not sufficient ventilation, or very often too much of it, for what is called ventilation is sometimes nothing else but draught. It is contrary to a rapid production at a minimum cost. Were it not for the expensive foods that are provided for the chicks by the the expensive foods that are provided for the clincks by the English method, they would not thrive; we do not allow the utilisation of food to help them to struggle against the conditions of changeable, wet and cold atmosphere. The food with us must be utilised to make flesh. No ground oats are given to them, but cheap food, as we shall see when we arrive at the chapter on feeding. This wastage of food and the tremendous amount of labour required in the English way are part of the cause of failure in this country in the attempt to produce table birds of fine quality commercially and economically. The comparison between the two methods will place my readers in a position to judge for themselves, and to enable them to do so, let us see how my chickens are dealt with after leaving the incubator room.

In big undertakings three brooder houses are generally in use. In the first one the chicks live for the first thirty days of their life; then they go to brooder house No. 2, in which they live a month and pass into the third bigger brooder house, where they remain till they reach 80 or go days, at which time they are sold; then the brooder No. 3, being completely cleared out, is thoroughly disinfected, and the chicks from No. 2, hardly noticing it, take possession of it. The little chicks from No. 1 occupy No. 2, and the

newly born chickens are brought from the incubators into the vacant and clean No. I brooder; the incubators are left for some days and then filled up again with eggs, which are due a month after the preceding hatching. This uninterrupted succession keeps the business going perpetually and smoothly all through the breeding season. There are several other ways of procedure; the chicks may be left in the same big house till they attain market maturity, then the house cleared out and filled up again and new chicks got ready for the following three months; but it is not practical unless we have three houses at our disposal in order to keep up the supply every month; the production is checked and the establishment of a regular clientèle prevented.

every month; the production is checked and the establishment of a regular clientèle prevented.

Whatever the method may be, it is easy to rear on a small scale 2,000 chickens every three months, either by producing them in flocks of seven or eight hundred monthly, brought up in three small brooder houses from which they are not removed, or in big flocks of 2,000 in a bigger house every three months. It makes 8,000 birds annually, which would bring an average profit of about £250. On a big scale the same number of birds reared would bring in at least £320 for every such number of birds. In big establishments three graduated brooder houses would be needed; it is much better, on account of the regularity of the output, to produce monthly and to have the birds changed from house to house every month. I have seen brooder houses in England in which birds of different ages are kept, but they are not reared on the same principle; we shall see how complicated such management would be on a big scale and how far from being as healthy as our method. The best way to realise these differences and to have a more striking and illuminative view of the method of scientific establishments is to follow our 240 chickens when they leave the incubator room and are brought to their first brooder house, where they are placed very quickly in a big rearer. The big box in which they have quickly in a big rearer. The big box in which they have been transferred has had its twelve partitions previously lined with square pieces of soft blanket. By taking these square pieces of blanket out by the four corners they are gently placed in the rearer without any of the chickens being killed or crushed in the transfer. They find there ample accommodation and plenty of top air without the slightest draught. This rectangular rearer is warmed by means of a lamp placed in the centre, whose reflected heat on the tin top of the cover provides a sufficient temperature. The lamp is surrounded by a screen of perforated metal covered with a black material, no light being permitted in the night

to show, and tire the little tender eyes, for a perpetual light is not only injurious to the eyes, but to the nerves and consequently to the whole constitution. Nature has made darkness for rest. Under the hens there is no lamp to cause the chicks suffering, and in the daytime they find the restful effect of darkness underneath their mother. To imitate this beneficent obscurity the glass top; of their rearers in my establishment are darkened several times in the day by dark green blinds; the glass top is not covered at night in order to permit the last inspection of the day, which takes place at 9 p.m. A glance into the rearer shows how the chickens behave; they are generally collected a little way from the lamp. Should they be too far away the heat is too great, and the lamp is turned down; if near the lamp the temperature is too low and the heat should be increased. The chicks are trained from the very first day of their life to come out of their rearers when they are called, by means of a tapping on the wood, and to go in by a clapping of the hands. It is really marvellous and charming to see, after two days, how obedient the little birds are. The rearer is placed in the sleeping compartment, its floor raised about four inches above Three little front doors permit the exit of the the ground.

chicks; these doors are closed the first doors two days and afterwards replaced by ones of wire netting. All along the front length of the rearer there is a slightly sloping board, with some strips of wood nailed on it, making a very convenient stairway. Access to this rearer is so easy that from the very first day the chicks come in and out of it quite by themselves without the risk of their being unable to find their way back; it has no corner where chicks could crowd together, no underneath part where they could hide themselves. The rearer is about 8ft.

long by 6ft.wide. Each rearer is separated from the other by wire netting, no curtains, no hanging things are permitted in them.

The first two days their litter is made of hay, afterwards it is replaced by finely ground peat moss and covered with a thick washable, soft cotton cloth, stretched and fixed at the corners. This cloth is changed every morning and night when the lamps are attended to, and thoroughly washed and disinfected. A small litter of chaff mixed with sand and peat moss is spread over it, in which they busy and enjoy themselves by scratching.

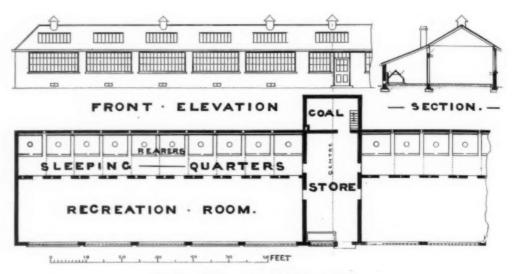
The big brooder house has two compartments—the sleeping quarters and the recreation room. In some of the English and American brooder houses there is also a division generally made of wire netting; but this does not fulfil the same purpose at all, as we shall see. In my establishment, which is the most modern of those existing in Belgium, the compartments are separated by a brick wall, not to make a corridor in which the rearers are placed, but in order to give them two distinct places in which to live. My birds do not sleep in the same atmosphere or temperature in which they have been during the day. Their sleeping compartment is not heated, it is aired by a constant admission of outer air passing through a double wall. The air is attracted by means of ventilating shafts placed at the top of the wall separating the sleeping compartment from the recreation room. The ventilation is regulated in cold weather by closing one or two of the numerous shafts; the air of the houses by means of this feature is constantly renewed.

Birds should not sleep in a warm room as they do in so many Belgian and American establishments. Where a great number of chickens sleep together they raise the temperature of the rearer sufficiently and it would be dangerous if the sleeping compartment were heated. When birds have been too long a time in a high temperature they are found panting in the morning and do not recover from this over-heating. I want them also to purify and strengthen their lungs; and one of my ways of keeping them healthy is by giving them plenty

of pure oxygen, much space, light and scratching exercise. This cannot be attained when they remain day and night in the same house on the same litter, breathing the air contaminated by their droppings and by the lamps. Two compartments change their surroundings, they run from one place to another, they seem to enjoy life better, they are kept more active. In winter, the nights being long, they pass half of their lives in their rearers and in the daytime they frequently return to them to warm themselves and to receive their food, and, as we shall see later on, every time they go to the sleeping compartment they find themselves in a cold and pure atmosphere. As soon as they are three or four days old the running space allowed them is increased. Access to the recreation room is permitted; there the windows are continually open.

Birds may be kept in large numbers in the same inside brooder without the necessity, as so many people imagine, for close stuffy houses; no hothouse for them in my establishment. The brooder house is large—3oft. wide (internal measurement), 15ft. high, and in two lengths of 8oft., divided by a store and administrative room 14ft. by 39ft.

The sleeping compartment is 12ft, deep and is divided into spaces 8ft, wide. The rearers placed in it should be



DESIGN FOR A BROODER HOUSE.

about 7ft. or 8ft. by 6ft. They give the chicks for the first few days a space of about 6ft. deep in which to run about, till they are permitted to reach the recreation room; this last one measures 18ft, deep and is divided by easily movable and adjustable wire partitions into spaces about 8ft. wide. These partitions are not shown on the accompanying plan, as their placing depends on changing circumstances. The recreation room is heated by means of four big pipes running over the high doors leading from the recreation room to the sleeping compartment. The wall opposite the one that cuts the brooder house in two parts is made partly of glass; the return pipes run underneath this glass front.

The heating is of the same sort as generally used for horticultural purposes, and may be regulated at will. The temperature is kept at 16deg. to 18deg. Centigrade (i.e., about 61deg. to 65deg. Fahrenheit), which is about the same heat the chicks would experience were they hatched in spring. Not only are all the windows left open, but in the centre of the roof there is a series of ventilating chimneys that may be opened at will. Attached to this big brooder are outside yards in which the birds are permitted to run whenever the weather permits; in these runs fir trees and shrubs give sufficient protection and shade. The floors of the brooder house are made of concrete, the walls are coated with cement plastering, the sleeping compartment has an asphalt floor. The ground slopes very slightly towards gratings tightly covered by sheets of iron to prevent air and smells coming into the house; six or eight such openings are placed the length of the house.

The washing and disinfecting water is collected by an outside drain which carries it far away from the houses. The twenty runs of the brooder are provided with a water tap, the water falling into a long gutter, which allows a large number of birds to drink easily together on both sides. The outlet of water from this gutter is by means of a pipe which joins the drain; a plug keeps the water in during the day. These guiters are movable and new ones set in place every day,

the dirty ones as well as the dirty trough being taken away every evening and soaked in water during the night in a long concrete trough to which disinfectant has been added. In the morning they are brushed and placed on shelves. It takes more time to explain all these precautionary measures than to do them, and it has not been possible to show all these little details of equipment on the plan, which is intended only to indicate the general arrangements of the building.

The birds in such well lighted and well kept brooder houses are very vigorous and cheerful. It is a charming sight to see them rushing out of their rearers at the sound of my voice, chirping so happily and contentedly, that they are the admiration of the very few who are permitted to visit them. For the first eight days they seldom leave their sleeping quarters. After their meals have been given to them, they are allowed one hour to play, then they are ordered to go to bed by the clapping of hands. The doors of the rearer are closed, the blinds pulled down and, after some minutes, the most complete silence reigns—they sleep, digest and rest. hour and a half afterwards the blinds are pulled up, the doors opened; they come out and immediately rush to the mash which has been in the meantime prepared for them and placed in troughs. It is very striking that, though after eight days they are no longer ordered to rest, yet by force of training they have got so much into the habit of doing so that they keep fairly to their old custom later on in life. This promotes quick growing and makes them beautifully fit for the fattening pens. Chickens newly born are like young babies; eating and sleeping are most necessary for them, too much playing about exhausts and excites them very much; they do not realise the want of rest; it is important to regulate them in this way. Do not tell me that it is too much fussing about; it is certainly less than the moving of coops and the running about from one to another. in my own interest to care for and study their well-being thoroughly. Sentiment allies itself in this case with profit.

As such a brooder house contains from 4,000 to 6,000 chickens they have to be taken care of every month and are worth the trouble devoted to them. Such a business is, in fact, a manufactory of chickens. How could these operations be carried out in the English method? Where fifty or sixty birds are kept in each separate brooder it would be quite impossible; it would require more time for thirty brooders to be attended to than for the thousands of birds that are kept in our houses. Our chickens are much better cared for, better cleaned, better looked after than by the English system; they are much happier and healthier than when kept in the cold, wet and wind of the open air of December or They are too young to know what suits them during the first days of their lives; but by our method they never catch cold, because they are not exposed to damp or wind, also they have no vermin. We shall see later on how important it is to keep them free from these pests. I know how strange it must appear to the English breeder that we keep our birds together in such great numbers; we can assure him that we preserve many little lives by our method which would have been lost on the English plan. Like English breeders we have some mortality which occurs generally in the first days of their lives, at the time when the chicks have cost very little; but the advantage of cleanliness, of rest, and the good effect of absorbing pure air in the long nights and the artificial long day that we provide for them, as well as the saving of labour, and the effectiveness of severe supervision, give us such a great margin of profit that we should eventually be able to afford the losses caused by crowding. Those losses occur sometimes in some badly managed houses that we know of where 450 birds are kept together, but in our own establishment we did not find the ercentage of mortality important at all; it is certainly less than among those experimented with by other methods

The saving of many lives and the quickest growth are two important considerations to take into account. The more birds that a brooder house contains the more profit it brings, and the quicker the birds are ready for sale the better it is for our purse. By my method of feeding and keeping them I very often obtain a difference of eight days or more in their growth. The multiplication of those days gained on thousands of birds economises thousands of days' food and brings in very high and unexpected profits. Added to those preceding advantages only one lamp is needed for each 240 chickens, that is one fourth the quantity of petroleum than would be necessary where they are kept in flocks of fifty. Remember that only one rearer has to be cleaned instead of five, that one litter is sufficient, etc., and you will realise the economical worth of my methods, which I claim to be more healthy, practical and scientific than those applied up to now in the intensive culture of table-birds.

When birds are reared in little coops on the grass, in little sleeping apartments not thoroughly cleaned every day, where constant supervision would be difficult if not impossible, they cannot always escape roup, gapes, diphtheria, etc., all consequences of cold, damp, wind and dirt; they can never be absolutely free from vermin. The people of our country know what it means for their pockets to put birds free from these pests in the fattening coops and are most particular about it.

I would like English people to see the difference between a bird reared in January, February or March by the English method, compared with the same bird of the same age brought up in my way, with no vermin and no checking in growth. They would find my bird twice as big as theirs. Another cause of failure in the attempt to rear table-birds on a big scale profitably and commercially in England has been in the kee together of chickens of different ages in the same building; it is neither practical, logical, not healthy. The odour which emanates from tiny chicks, even if they are very well aired and cleanly kept, is as much as their lungs can bear; but if they have to breathe the emanation of bigger ones night and day it is too much for them. It should only be allowed where birds are brought up in little flocks of fifty or seventy-five, in a room which contains at most 1,000 birds, and where they are given free access all day long to open runs. I have seen several poultry farms in England where birds are kept in this way at the beginning of spring, for breeding and laying purposes, but it cannot answer at all where birds are reared for the table.

How can we obtain a uniformity of attendance, a business carried on automatically as in our way, where everything is simplified to such an extent that once the business is started it goes by itself? If we have to bother about chickens of different ages, what sort of control shall we need in order that such things as cleanliness, heat and food are ensured as they ought to be? The mixing together of birds of different ages is thoroughly bad. The temperature which is suitable the first day of life of a newly born chick is far too high for a bird of twelve or fifteen days. The food-mostly table-birds—which suits the first age does not suit the second one, and if different sorts of food have to be ready, according to the different ages of birds, they cannot be made so economically as when we have only one food for 1,000 birds. The distribution of these different foods would also complicate the attendance and supervision.

The hardy way of bringing up the chicks which is in vogue in this country is very good, but would be still better if it began only when the chicks have passed through their first tender days. So many little chicks are handicapped from the beginning which should be able to pick up strength and keep alive, if properly treated from the beginning of their lives. Do not tell me that they are not worth keeping. It is childish. Keep them if you can, were it only for the table. I am afraid it will be a difficult business to change English minds on this subject, but I will try hard. People here are not easy to move. I found it out myself in many conversations that I have had on poultry matters, but if I succeed in inducing them to try I know that they will soon agree with me. Unfortunately, if there are people eager to be taught, there are still more that do not even desire to consider or try other methods. I cannot quite explain this, except by a want of deduction, an obstinate "sticking-up" for the old ways, that is absolutely contrary to intelligence and science. If all that which has always been done has to continue for ever, I wonder where and when will improvement and progress be made.

(To be continued on June 12th.)

A MOTHER'S FACE.

Her eyes were bright when first the war call came:
Her brow had lofty look of patriot pride
When, with a quick "Good-bye," he left her side,
And, only in her dreams, she heard the name
Of "Mother," gaily called in ringing tone.
And—then—fear, hunger, crept within her gaze
And lined her forehead: while, with grim amaze,
She learnt what women bear—and give no moan!
A little longer: holy strength and peace
Swept wrinkles out: and those who knew her best
Guessed she had battled with strange hosts of pain
And—won—by prayer. At last, each worry-crease
Left face and heart: for, with a look of rest,

She held her boy within her arms again.

LILLIAN GARD.

LITERATURE.

A BOOK OF THE WEEK.

O one has more successfully rendered the inner spirit of Russia than Anton Tchekov, and his greatest success has been achieved in the short stories now translated by Adeline Lister Kaye and published under the title *The Steppe and other* Stories (Heinemann). The piece which gives its name to the volume is the most important in it and deserves even wider consideration than it has yet received. No orthodox plan is followed such as we are accustomed to in English and French Practically speaking, the tale is destitute of short stories. It is only a record of a journey across the steppe in a britchka. But, nevertheless, on this canvas Tchekov has been able to display his genius, for surely a Russian steppe never has been rendered with such gloomy power. of it consists in throwing the impressions on the mind of a boy with a delightful name which is an index to his characteristics. Egorooshka differs entirely from an English boy of the same status. He is a little poet, sensitive, emotional, imaginative, who never gets rid of the home-sickness with which he starts, nor is able to take any delight in journeying for its own sake. One of our own small boys in similar circumstances might have cried when he parted with his mother, although he would have done his best to conceal it, but as soon as the rickety old carriage started on its journey he would have been taken up with the sights and incidents of the road and temporarily, at least, have forgotten his nostalgia. But Egorooshka is very serious. He is not exceedingly interested in his two companions, Kuzmitchov, "a clean-shaven man wearing spectacles and a straw hat," and Father Christopher, "a long-haired little old man in a grey linen caftan, a wide-brimmed black hat, and an embroidered coloured belt." They are going to sell wool and are taking coloured belt." They are going to sell wool and are taking him to school. The tendency of his mind is displayed at the very beginning when, as they pass the well known spots, his attention is concentrated on the white crosses and monuments which looked out like white blots through the verdure of the cherry trees.

He remembered when the cherry trees are in flower that these white blots blend with the cherry blossom, and it all looks like a sea of foam; and when the cherries are ripe, the white monuments and crosses are strewn with purple blood-like drops. Behind that wall and under the cherry trees sleep day and night Egorooshka's father and grandmother Zinaida Danilovna. When grandmother died, they laid her in a long narrow coffin, and placed on her eyes—because they would not close—two five-kopeck pieces. She was cheerful till the hour of her death, and always brought soft cracknels powdered with poppy from market, and now she is sleeping, sleeping

The idea of the grandmother laid to sleep in her coffin with five-kopeck pieces on her eyes to keep them shut recurs again and again to his mind in the course of the journey. His imagination cannot escape it. He thinks of the old woman awaking and knocking on the coffin lid, not understanding where she was, and dying again wild with fright. And his fancy plays with pictures of others whom he has known "in a dark grave far from home, abandoned, helpless, dead." This, no doubt, is morbid, but it is an helpless, dead." This, no doubt, is morbid, but it is an essential part of the picture. Childhood, as we know it, is forgetful of things, and it is the mind of the elders that returns to them. The conversation in the britchka throws considerable light on the attitude of priest and moujik to learning, as something good to have in a way, yet equally good to relinquish. The talk goes on as they cross a broad, limitless plain intercepted by a chain of hills. Tchekov's descriptions of Nature are exquisite, as witness the following of a Russian landscape under a summer dawn:

The reaped corn, the high grass, the wart-wort, the wild hemp, all a rusty brown and half dead from the summer heat, now bathed in dew and caressed by the sun, revived, ready to flower again. An arctic petrel flew across the road with a cheerful cry, the Siberian marmots called to each other in the grass; far away to the left somewhere, a peewit wailed; a covey of partridges, startled by the britchka, rose up, and with their soft "trr" flew away to the hills; grasshoppers, crickets, field-mice and mole-rats struck up their squeaking monotonous music in the grass.

When they stop, it is to take a siesta in the middle of the day. But Egorooshka is not drowsy and goes out exploring He chases yellow butterflies till he comes his surroundings. back to his friends in the cart; and here occurs an incident exquisitely described and touching upon that mysticism which is of the very essence of the Muscovite:

While Egorooshka looked at the sleeping faces he suddenly heard a low singing. Somewhere quite far away a woman was singing, but where exactly, and on which side, it would have been difficult to say. The song

was tender and melancholy, more resembling weeping, scarcely audible; it sounded now to the right, now to the left, now in the air, now on the ground, just as if some unseen spirit were floating about the steppe and singing. Egorooshka looked round, and could not understand where this strange singing came from; afterwards, when he had listened attentively. she began to think that it was the grass singing. In her song without words she, half dead and passed away, plaintively and simply, was persuading someone that she was in no way to blame, that the sun had scorched her unjustly; she affirmed that she passionately desired to live, that she was still young and would be pretty if it were not for the heat and the drought; it was no one's fault, but she begged someone's forgiveness, averring it was unbearably painful, sad, and a pity for her.

The plaintive tender song only made the air feel stuffier and hotter. To drown the singing he hummed and ran back to the reed-grass.

From thence he looked on all sides, and discovered what was singing. By the nearest cottage of the little village stood a woman. She wore short small-clothes, was long-footed and long-legged like a heron, and her hair was turning a little grey. From beneath her sieve some white dust lazily trailed down the hill-side. It was evident now that she it was who was

The old woman and her song are unforgetable.

In very great contrast is Moses Mosevitch, the Jew seeper at whose hostelry they stop for refreshment. innkeeper at With the blandness of Boniface wherever he is found is mingled a very great proportion of rascality which only seems to want an opportunity to develop itself. Again the fine imaginative dreaminess of the boy is thrown into startling contrast by the Rabelaisian manners of the moujiks by whom he is attended. Much has been said in praise of the simplicity of life in rural Russia, but it is not in reality a fine or beautiful simplicity. It has been said that the civilisation of a people can always be gauged by the manner in which eat. If so, that of the Russian peasant would seem to be at a very low ebb.

Before removing the pot from the fire, Stepka strewed in three handfuls of millet-meal and a spoonful of salt; finally he tried it, smacked his lips, licked the spoon, and croaked in a very self-satisfied way—that meant the gruel was ready.

All except Panteli sat round the pot, and set to work with their spoons.

"Oh! you! Give the little sir a spoon," sternly remarked Panteli
Does he not want to eat too?"

." sighed Kiruha "Ours is moujik's food . . ." sigh "And very good too, if he is hungry."

They gave Egorooshka a spoon. He ate his food without sitting down. standing by the pot and looking down into it as into a deep pit. The gruel smelt of raw fish, and in fact there were fishes' scales mixed with the millet. It was quite impossible to catch the cray-fish with the spoon, so the eaters had to take them out of the pot with their hands. Vassia, in particular, made very little ceremony about it—he even dipped his sleeves as well as his hands into the gruel. All the same, the gruel tasted excellent, and it reminded Egorooshka of the cray-fish soup which his mamma made at home

To this coarseness and even uncleanness of manners have to be added very gross superstition and a religious feeling which does not vitally differ from it. To Protestant ears, the saying of Mass, the making of crosses, the kissing of ikons, and similar observances, savour of a darker age, and in this respect Tchekov does not appear to have been in front of the time in which he lived.

There is one more feature of The Steppe which cannot be passed without notice. It is the extraordinarily telling description of a thunderstorm. It is spread over many pages, and we cannot do more than quote the oncoming of the thunder:

There was a very distant sound as of someone walking over an iron ro very likely that someone was bare-footed, for the iron gave a hollow rumble. "It's all around," cried Kiruha.

Between the distance and the right of the horizon the lightning flashed brightly that it illumined part of the steppe, and the spot where the clear sky bordered on the dark. A tremendous cloud, with large black tatters hanging along its edge, slowly moved in one compact mass; similar tatters, pressing one over the other, were gathering on the right and the left horizon. This ragged and tatterdemalion condition of the clouds gave them a kind of drunken, devil-may-care appearance. Sharply, and no longer dully, sounded the thunder. Egorooshka crossed himself, and quickly put on his

The story ends with the safe bestowal of Egorooshka in the care of his mother's friend. He takes a last look at his departing companions and, returning to the house, greets with bitter tears the unknown life that is beginning for him. The story is a masterpiece, but of a kind to which the British public has not been educated. The best short story in our opinion is probably Wandering Willie's tale in "Red-gauntlet." The best constructed stories unquestionably those of Guy de Maupassant, and the best that ever were written in any language are some of those in Boccaccio's "Decameron." If Tchekov's achievement were to be judged by the standard set by those, he would be found wanting; but he is one of the voices that are a law unto themselves. The little story is great for many reasons, but chiefly because it is natural to the man and, therefore, in the best sense original.

THE CITY OF THE SEA.

Constantinople. Eight Poems, by Victoria Sackville-West. (Privately

THESE poems about "the City of the Sea" would be welcome at any time, but are doubly so just now. For some years the writer lived among the Turks, and she has caught with a fine imaginativeness its strange romantic atmosphere from the "blending of the mist and sea and sun" that belong to early morning, to the street cries. One poem tells how a neglected garden "of broken wells and fountains" standing against the blue of the "far Bithynian shore" was populated with quince and pomegranate, roses and cyclamen and daffodil. The Muezzin, the fire cry "Yanghin var! yanghin var!" and the threatened entry of the Russians are irradiated with the poet's fancy. But the poem we like best for its clever and ingenious rendering of a familiar street scene is the one called "Leblebidji," which is, being interpreted, "Little white beans." We venture to transcribe it:

> I know so well the busy cries That echo through the quarter Till daylight into evening dies And stars shine in the water, So dear they have become to me, Leblebidji! leblebidji!

On peaceful English country nights Their rapid gay succession And all the sea-reflected lights Will pass from my possession never from my Leblebidii! leblebidii!

Past English evening scents and sounds, Past English church-bells ringing, The Turkish watchman on his rounds, The Turkis.1 pedlar singing Through narrow streets above the sea " Leblebidji! leblebidji!"

Will surely pierce a ghostly way, The music underlying, And in the shades of falling day As in the distance dying, A little call will come to me,
"Leblebidji!"

A Beacon for the Blind, A Life of Henry Fawcett, by Winifred Holt.

THE life of Henry Fawcett was written in 1885 by his friend, Leslie Stephen, and Miss Holt's book is intended to supplement rather than supersede the earlier biography. Her object has been to supply more personal detail, and she has succeeded in getting together a good deal. She has visited Salisbury, where Fawcett was born, and Cambridge, where most of his life was spent. If the reminiscences of his tailor and bedmaker are not very orable, yet they do add something to the portrait. In literary skill the authoress falls short of the author, as she herself readily admits. Stephen would not have said "to metamorphise his attire" (page 52); he have said, "to change his clothes." But, for all such deficiencies, this would not have said "to metamorphise his attire" (page 52); he would have said, "to change his clothes." But, for all such deficiencies, this book was worth writing, and will give pleasure to many not too exacting readers. Miss Holt's special purpose is to hold up Fawcett's example before the blind, to whom she has devoted much of her life. And what Fawcett did in political or social life, though it was considerable, matters much less than the really marvellous courage with which he determined that the loss of his sight should not alter the course of his life, and kept to that determination. His life is a trumpet call to all who suffer from the same disability, and Miss Holt tells it with genuine sympathy and admiration. There are a number of photographs; and many readers will like to see the facsimiles of the letters of condolence which Queen Victoria and the Prince of Wales wrote to

The Blue Horizon, by H. de Vere Stacpoole. (Hutchinson.)

OF these thirteen stories most deal with the sea, and some of the best are about fishing. But the fishing is not like English fishing; it is carried on, on the coast of Florida, by American millionaires in the intervals of deals in corn or railways. They live at fishing clubs, and go forth in white petrol launches, attended by Seminole Indians, to fish for tarpon or sea-bats. sea-bat is attacked with a harpoon; it seems that he may run over a ton in weight, and that he rises at times out of the water into the air, descending weight, and that he rises at times out of the water into the air, descending with a splash like the report of a 12in. gun. So there is plenty of excitement and a good deal of danger. The whole scene, with the colour and transparence of the sea and the glorious sun, is so described that one longs to quit this blood-stained old Europe for such a paradise. And two at least of the fishing stories are love stories as well, and c.d. with a marriage. Both girls are delightful, and Van Amberg is an acute study of one type of American character. There are also gruesome stories, especially one of a cuttle-fish which can dart out tentacles 30ft, long to loop you round the ankle or thigh. In both kinds the author does well for his readers. Perhaps the least successful

is the last, "The Girl at the Gate"; it reminds one of some stories in "Puck of Pook's Hill," and that is a bow which only one man living can draw

The Captive, by Phyllis Bottome. (Chapman and Hall.)
THIS is a lively and sincere book. It describes how Rosamund, a typically Maisie, an older woman and a professional artist, to let her come and share her studio in Rome. Rosamund really wants to escape from her surroundings, but thinks that she wants to learn to paint. Maisie sees quite clearly that she never will be able to paint or escape from her traditions, wherever she is, but she cannot help taking her to Rome because she cannot help being kind to people. Indeed, the description of the innate unselfishness, maternalness and "the inveterate mercy" in the nature of this woman, who has knocked about for years in studios, and talks and acts the independent, whimsical Bohemian, is far the best and most serious thing in the book. It is a description which could only have been written by another woman. We have quoted one of Miss Bottome's rare descriptive phrases; she usually lets her characters speak in a lively and convincing manner for themselves. Rosamund, as was to have been expected, carries away the young Irish painter, Pat, who for ten years has been so used to Maisie's companionship that he only discovers that she is also the person that he wants for his wife after he is married to Rosamund. Pat is somehow as unsatisfactory as nearly all women's heroes. It is difficult to believe that the work of a man nearry all women's neroes. It is difficult to believe that the work of a man which is blasted because his wife wishes him to have regular habits and meals can really ever have been any good. It makes the readers want to confront Miss Bottome with a long list of the greatest artists and poets who he is convinced always had regular habits and meals. Let us say Wordsworth, Fra Angelico and Sir Walter Scott, although it is to be darkly feared that Miss Bottome might not think Scott a really great man. He will also want to argue that Miss Bottome considers her art students and their artistic temperaments too seriously and admiringly-too much as they consider themselves- and that, on the other hand, she sees the country house environment of Rosamund too much from the outside. So that, though she eems fair and friendly enough in her comparison of the two worlds, her judgment is not, perhaps, deeply balanced and just. But it is precisely because the book is so good and alive that it stimulates the reader to arise

BREAD AND MEAT.

PREDICTIONS OF MEAT SCARCITY FULFILLED.

VENTS have rapidly occurred to justify the repeated and grave warnings which were given in the correspondence on "Bread or Meat" which we published some The scarcity of meat is now engaging the time ago. serious attention of the authorities, and the Advisory Committee of the Board of Trade has declared that the only way of avoiding a further advance in the near future would be an appreciable reduction of the demand by the civilian popula-This opinion has been endorsed by the Board of Trade, which has drawn the attention of the public to the great importance of restricting the consumption of meat so as to economise the national supplies and avoid an excessive increase of prices. The immediate causes adduced in explanation are, the enlarged requirements of the British and French armies and the shortage of vessels equipped for the conveyance of meat from overseas. If these considerations stood alone, they would induce all patriotic persons to co-operate with the Government and do what they can for the war by denying themselves the free use of meat to which they have been accustomed. Everyone who curtails his or her consumption of meat is co-operating with others in helping the soldiers and the Government. We hope there will be no mistake about this and that the public will respond with alacrity to the appeal. Its success depends upon voluntary sacrifice. In many cases the word is rather strong, because the quantity of meat consumed could be reduced with benefit.

But there are other things to be taken into account. was shown unanswerably by Mr. Cleghorn in the original article which opened the correspondence war or no war, we were bound at no distant date to be faced with a serious diminution of our meat supplies. Consumption at the sources of origin is very largely increasing, and where we used to be the only purchasing country on a large scale, we have now many others competing in the market. addition to the public appeal, there might also have been one to the owners of stock. Our home meat supply is seriously diminished in ways easily avoidable. For one thing, far too many calves are slaughtered. In spite of all that has been said, many owners of dairy herds make over their young calves to the butcher; whereas it has proved to be a profitable thing for the grazier to buy and rear them. In the second place, tempted by the large money offered, many people have fattened milch cows and breeding stock in order to realise a profit as speedily as may be. This is a very injurious practice to which the Board of Agriculture has directed attention. and if it were discontinued the effect would be a perceptible increase in the home supply and, to some extent, a check in the general tendency to raise prices.

SHIRE BONE & THOROUGHBRED BONE

FROM THE PRINCIPAL OF THE ROYAL (DICK) VETERINARY COLLEGE.

Sir,—In your issue of May 15th, page 652, you publish an interesting and suggestive communication on "Shire Bone and Thoroughbred Bone," concerning which it seems necessary something should be said to clear up points which may be very readily misunderstood by the general reader. So far as can be determined by an examination of the excellent photographs illustrating the article, the Shire bone is a left metacarpal (cannon bone), while the thoroughbred bone is from the right limb. Also, so far as can be determined from the photographs reproduced, the sections of the bones are both viewed from below, i.e., towards the carpus or knee. This means that in the photograph of the Shire bone that part which looked towards the inside of the limb is to the left of the photograph, while the inside of the thoroughbred bone is to the right. If this assumption is correct, it follows that the outlines as given on page 654, do not afford a true comparison of parts.

outlines as given on page 654 do not afford a true comparison of parts.

I am also struck with the shape of the thoroughbred bone, which, assuming that the section was made through the middle of its length, differs markedly from the outline of a normal metacarpal bone. It would be decidedly interesting to compare a considerable number of pure Shire or Clydesdale and thoroughbred bones, for it is only in this way that conclusions of value can be reached. Single specimens are liable to be very misleading. Unfortunately, I have no metacarpal bones of Shires, and those I have of Clydesdales are of doubtful ancestry, and I have only one skeleton of a thoroughbred (two year old). However, to contribute a little towards the problem, sections have been made through the middle of the right metacarpal bone of the two year old thoroughbred, and, for comparison, through the middle of the right metacarpal bone of a heavy horse—either a Clydesdale or one with a good deal of Clydesdale blood. These have been photographed on



Heavy Horse.

Thoroughbred.

the same plate, and a print is sent herewith. Great care was taken to make the sections exactly at right angles to the long axis of the bone in each case, and in taking the photograph care was exercised to ensure that the sectioned surfaces of the two bones were at the same distance from the lens. In each case the inside of the bone is to the left of the photograph. As the sections were not magnified, any difference of texture which may exist is not brought out.

not magnified, any difference of texture which may exist is not brought out. In comparing the two sections, the apparent excrescence of the left lower corner of the larger (left) bone should be neglected, as it is merely the small metacarpal (splint) bone which has fused with its larger neighbour. In the thoroughbred the small bone was separable, and is, therefore, not included in the photograph. The slight value which attaches to this photograph of a single thoroughbred bone rests in the difference in its outline as compared with that already published in COUNTRY LIFE.—O. CHARNOCK BRADLEY.

FROM DR. A. KEITH.

Sir,—The sections you publish of the Shire and blood cannon bones are of interest not only to those who breed horses, but to all who study the growth of bone. We have known these hundreds of years past that living bone is the most plastic of substances; it reacts and shapes itself to all physical strains brought to bear on it. The human skeleton becomes adapted to the manner of life of the individual. Your sections of the cannon bone show that the growth of that bone—the deposition of the laminæ which give the grain of the bone—is different in the blood and Shire; they are apparently subjected to different strains. From an examination of your sections I conclude that sections of the cannon bones of the foals of Shire and blood horses would be much more alike. The chief difference appears later—the blood specialising in one direction, the Shire in another. Could you obtain sections of the colt stage? But the problem which I find very difficult, and which you leave unanswered, is: What is the advantage of the rounded cannon bone of the blood, how does it subserve the quality of speed, what is the advantage of the flat bone to the Shire and how does it help in giving strength? The questions need a good knowledge of animal physics for an answer; a better knowledge than I possess. Are the limbs of a draught horse subject to lateral strains—giving width of cannon bone—and a blood—only to a front to back strain—giving roundness of bone? Do you not think the Shire cannon bone the least like the primitive horse type; the more specialised? You see that I am more ir need of information than in a position to give it.—A. Keth. Royal College of Surgeons.

FROM MR. GEORGE CRADOCK.

SIR,—With regard to the article in Country Life illustrating the cannon bones of thoroughbred and cart horses, also the cross sections, I was much interested in these, and when writing my notes upon Hunter Breeding I

had no idea you would find the means of illustrating so ably the meaning I wished to convey. My first observations on this matter were many years ago, when hunting on Exmoor, and my stud groom told me he wished to get the cannon bone of a deer to use for boning boots, as it was of exceedingly fine grain and almost like ivory, and was the best thing. After that I observed the apparently very small bone of a heavy stag, and the pace at which he travelled over exceedingly rough ground. Upon examining one of these cannon bones, I noticed the very fine grain of the bone, which looks very much like ivory. It evidently had great strength compared with the small size of the bone, which carried considerable weight.

Shortly afterwards I was discussing the matter with Mr. Tom Dawson, M.R.C.V.S., of Pontefract, and my observations regarding the texture of the bone of various horses. He then told me his opinions, and also showed me sections of different bones. His observations over many years agreed with my own. I had no means of photographing under a microscope a section of the bone, but your photographs have illustrated far better than any words the comparisons in the sectional area of the bone of the two classes of horses, and also the comparative shape and formation of the bone. I do not think that I could add any further remarks that would be of any service to you or to your readers, or I should be extremely pleased to do so.—G. W. Cradock.

FROM PROFESSOR LINDSAY.

SIR,—I have read the article on the limb bones of the Shire horse and of the thoroughbred with interest, and I gladly make some comments on the points you raise.

You come to the conclusion from the contrast and comparison "that the bone of the thoroughbred possesses superior qualities." Doubtless it does if greater fineness of grain, greater density of structure and a different disposition of material confer superiority on one bone over another, for it may be admitted that you demonstrate the difference in these respects between the cannon bone of a thoroughbred and that of a Shire horse. The question, however, is, Does this difference imply superiority, a superiority without qualification?

The limb bones of a quadruped fulfil the double function of serving as supports for the trunk and as levers for moving it. They are mechanical devices, and are superior or otherwise, according to the efficiency with which they meet the mechanical requirements exacted of them. These requirements are not quite the same for all animals of the same species, or even for the same animal at all times. It is evident to everyone that when a limb is used as a lever for moving a load in haulage, it is subjected to a kind of strain different from that which it has to bear when it acts as a spring at the landing after a leap. These-and other kinds of strain each bone in a horse's limb must be adapted to meet. But it is not always equally well adapted to all of them. When one requirement is predominant and others subordinate, as is often the case in different types of horses, the predominant need receives preferential treatment in the adaptation. This special adaptation is not solely, or even chiefly, effected by modification of the general conformation of the bone, for we do not find that corresponding bones in the limbs of different types of horses are notably different in external configuration. It is rather to the internal structure we have to look to discover the special adaptations.

The ground substance of bone is the same material as forms sinews and ligaments. It consists of delicate fibres which yield gelatine on boiling. Rigidity is got by the deposition of lime in this groundwork of fibres; and toughness and elasticity on the one hand, and rigidity and brittleness on the other, will be apt to vary with the relative proportions of the component materials. That is one point to be taken into account in judging the quality of a bone. Another point is connected with the fact that the material is not laid down in a homogeneous mass. Even the densest bone is permeated with fine canals not visible to the naked eye, through which the blood vessels run. In bones less dense the canals are larger, while in spongy bone they become conspicuous spaces. It is this which gives to bone what you call fineness or coarseness of grain.

Now, if the material in a bone of coarser grain were disposed haphazard, leading to increase of bulk without an equivalent increase in strength, one might be justified in ascribing a superiority to the bone of finer grain. there is no such haphazardness. The solid spicules of the sponge-work are laid down in the lines of stress and strain with as much precision as the engineer devotes to the arrangement of the lattice work of a great roof, and with the ame object in view, namely, the avoidance of weight that would be worse than useless. To pass judgment on the texture so designed, certain data are required. One needs to ascertain the relative amount and direction of the various forces that usually act on the bone, implying considerations with respect to the position of the centre of gravity of the trunk, with respect to the angles formed by the axes of the different segments of the limb, and I know not what besides. These data having been acquired, it has to be determined whether the bone in its internal structure reacts to the external forces efficiently or inefficiently according to the laws of mechanics. Obviously such a problem would not be easily solved, and the value of the solution would be incommensurate with the labour expended on attaining it; for, if carried through in a particular instance, the resulting judgment would apply only to that particular bone in that particular animal at that particular time. It must be remembered that a bone in situ is a living thing, and it will accommo date itself to circumstances. If, for instance, the set of the various segments of the limb slowly alters, the cannon bone will readjust its internal structure to meet the change in direction of the forces applied to it, material being removed at one place and deposited at another.

Your friend, who calls attention to the different distribution of material in the cannon bone of a thoroughbred from that in the same bone of a Shire horse, is right in saying that the greater thickness observed in one region of

the section from the thoroughbred is in the position where greatest strength is required, that is, where it is required in that thoroughbred. It does not follow that the different distribution of material in the bone of the Shire horse is a bad arrangement—for that Shire horse. The different character of the bones in each is dependent on the difference in the general bodily conformation and habit of life of the two breeds, and a material alteration could not be effected apart from these. The same mechanical end may be attained by more means than one, so that whether largeness of bone or smallness should be aimed at in breeding is a question which, it seems to me, cannot be settled on merely theoretical grounds. By practical experience, however, superior qualities may be discovered in the bones of particular breeds, qualities which are not discoverable by post mortem examination. It is conceivable, for instance, that bones vary in their disposition to provide a larger or smaller margin of safety against the strains to which they are liable to be subjected. This disposition could doubtless be conserved in heredity and strengthened by selection.

You say, "If animals can be classified according to the fineness of grain

You say, "If animals can be classified according to the fineness of grain and density of their bone, and placed in an order of merit, such as Mr. Cradock drew up—deer, Arab horse, English thoroughbred and Shirc—one would think men of science must have done the necessary weighing and calculation ages ago for the benefit of the unlearned and merely practical men, like myself. Here it is obvious that a scientific examination ought to make further argument unnecessary, and settle once and for ever the differences between the 'bone' of the thoroughbred and that of the cart-horse." From what has been said in the foregoing I hope it has been made clear that the settling of these differences would not amount to much, and that the classification of animals according to the "grain" of their bones would also not be of great value. To carry out the work you suggest would be very laborious, and to carry it out on scientific lines would call for the possession of talents on the part of the investigator that are not usually found combined in one individual. The nature of the investigation is not unappreciated by men of science, but the practical utility of its accomplishment is not easily to be foreseen.—John Lindsay, M.A., M.D., Professor of Physiology, Glasgow Veterinary College.

FROM CAPTAIN T. H. BROWNE.

SIR,-The excellent and splendidly illustrated article on the bone, or rather the difference of the bone, of the thoroughbred and the Shire horse in COUNTRY LIFE of the 15th inst. appealed to me with peculiar interest, for I have a great belief in the superior density and power of resistance of the bone of the thoroughbred. It has, however, been reserved for Mr. Herbert Pratt, writer of the article to which I allude, to drive the point home to the lay mind by means of the illustrations by which the article is illumined. These illustrations demonstrate beyond the possibility of doubt not only that the bone of the thoroughbred horse is superior—vastly superior—to that of the coarser bred horse in quality, but that to the eye, at all events, it is pretty nearly equal in quantity. Measured externally, the cannon bone of the Shire horse is no doubt bigger than that of the thoroughbred, but the internal cavity of the bone being also considerably greater than that of the thoroughbred, the bone walls, that is the weight carrying resistance, are thinner, not only in proportion, but, judging by the eye, in fact. If this beso, we may conclude not only that the bone of the thoroughbred is of better quality, but that, although measuring less circumferentially, it is actually This is an interesting point which we might perhaps ask qual in volume. Mr. Pratt to decide by taking a section, say, half an inch or an inch deep, out of each bone and submitting these sections to the test of an accurate balance. It would not be difficult by a further process to arrive at the actual amount of bone in each section. Be that as it may, there should no longer be any hesitation about the value of the thoroughbred horse as an improver of general utility stock. Arguments and theories that, as begetting bigger boned stock, the Shire or other coarser bred horses were better than the thoroughbred must, I think, be at last disposed of. I would, however, suggest—as I have done on previous occasions—that breeders of general u:ility horses have it in their power to exercise considerable discrimination in the selection of the thoroughbred sires they may elect to use. It has been, we may take it, established that the bone of the thoroughbred is better—more dense, harder, more adapted to resist shock and to carry weight—than But even among thoroughbred horses there are that of coarser breeds. certain strains of blood of which bone and power are distinguishing characteristics; the inference being, to my mind, that by judicious use of these strain of blood the breeder of hunters or general utility horses may reasonably expect to arrive at the production of animals possessed of bone equal, even in extern measurement, to that exhibited in stock got by Shire horses, and infinitely superior in quality. I have, indeed, little doubt that, by careful selective breeding, it would be possible to produce clean thoroughbred horses showing more bone than the great majority of what we now call hunter-bred or halfbred stock. Hitherto the value of thoroughbred stock has prevented the carrying through of any such experiments on anything like a practical scale. It is, however, possible that in these evil days owners of bloodstock may be tempted—enforced—to turn their attention to the breeding of stock saleable both from a racing and a general utility point of view. Frankly speaking, I do not think that the attempt would be altogether successful, in so far as breeding racing stock of the highest quality is concerned; but it is my belief that it would be successful as applied to the production of stock eminently—super-eminently—adapted for hunting, general utility and, above all, for military purposes .- T. H. BROWNE.

FROM MR. DUDLEY WARD.

Sir,—I am sure your article illustrating the difference in quality between the bone of the Shire and thoroughbred will be informing to many and interesting to most of your readers. For inyself, I carried out a similar investigation when a schoolboy, though, of course, having no skilled assistance, I could not obtain cross sections. Still, I was perfectly satisfied at that time of the facts which you have now published. But, if you will pardon me for saying

so, I fancy you have taken much trouble to prove facts which are, after all, of only secondary importance. When a riding horse, through being over-weighted and overstrained, breaks down in the foreig, it is, so far as my experience goes, invariably in the tendons and ligaments below the knee that the trouble lies, and for the purpose of this discussion we need only consider the back tendons and suspensory and check ligaments. I have never known nor heard of a horse which broke down as a consequence of the cannon bone itself being insufficient in strength, and therefore snapping. Therefore it is evident that a consideration of the tendons and ligaments is of primary importance; and I think that a series of photographs showing the contrast between the tendons of Shire horses, hackneys and thoroughbreds, including well bred hunters, would be of great value in convincing those of your readers who are disposed to favour the introduction of "soft" blood (and bone) into hunter breeding that they are mistaken. The tendons and ligaments eferred to above, in thoroughbreds and ponies and the breeds closely allied thereto, are largely developed, and in all breeds primarily intended for draught, whether light or heavy, are comparatively small. In short, animals which have to draw weight exercise and develop quite different tendons in the foreleg from those animals which have to carry weight, which made the old-fashioned packhorse an admirable cross with the blood horse in hunter breeding, and the light draught horse of very different value for the same purpose

A short time ago I suggested in your columns that as an alternative to Shire blood—as an outcross for hunter breeding—recourse might preferably be had to a certain old-established line of hackneys—never shown in the ring—and which had natural and riding action. I spoke of their suitability from hearsay—always, I fear, a grievous mistake. Since I wrote I took a favourite brood mare a long journey to a stallion of that breed, but liked him so little that, though late in the season, I let my mare miss that costrum and took her home. I found a horse perfect behind the saddle, of great depth and with shoulders which were good enough, a large but well shaped head, not nicely put on, with very short legs, especially below the knee; but despite that advantage, it was there the fault lay. The cannon bone was, as I have said, very short, and was thick as well; but still, the circumference below the knee was only just over 8in., certainly a bare 8 Jin., for there were, comparatively speaking, no back tendons to carry a horse which, though only 15h. zin. high, weighs 13cwt. The horse's top was up to 18st., but I do not think, for the reasons I have given, that he would have carried 15st. through the dirt as well as many a little blood horse which might be called a 13st. hunter.

I need hardly say the photographs, whose publication I advocate, must be taken from live horses; tendons and ligaments do not stand out unless there is weight upon them and the heels are on the ground, and it would be necessary to clip the legs of the Shire horse.—Dudley C. Ward.

FROM MR. HENRY GRAY.

SIR,—As to the difference in texture between the bone of the thoroughbred and that of the Shire, I think that is common knowledge of every veterinary surgeon. It is, however, not peculiar to horses alone, but common between the sluggish animals and the swift of every species. Where you get swiftness, the bone is more dense than in the slow-moving animals. There is, moreover, the question of heredity, nutrition and utility of the creature. I will, however, go further into this question when I have more leisure. In the meantime you might consider the bones of the pure bred Suffolk, the Cleveland Bay and other lighter pure breeds, as well as those of the cross breeds. You must not forget when you make comparisons to take into consideration the age, work, etc., of the different animals. The various types of poultry, the hare and the rabbit, etc., should also be taken into account. The bones are in keeping with the whole of the soft structures, which are coarser in the heavy breeds than in the lighter and swifter. The bones, etc., of the heavy navvy are coarser than the carefully fed and swift, well bred man who does not usually do any heavy muscular work. The dense portion of bone is termed the compact lissue, and the looser or more porous or central portion the cancellated lissue. On the anatomy of bone you could not do better than refer to Sisson's "Veterinary Anatomy" and Chauveau's "Comparative Anatomy of the Domesticated Animals" (Baillière, Tindall and Cox, 8, Henrietta Street, Covent Garden). Personally, I have made no special study of bone. There is too much to know in veterinary science, and the practical man must necessarily give more attention to those sections of knowledge that are of more importance to him in his daily work; he has to be a utilitarian first and a scientist afterwards.—Henry Gray.

FROM DR. J. AUGUSTUS VOELCKER.

Sir,—Without question, the subject on which you write is one of great interest and also importance. My regret is that I have no claim whatever to speak with any authority upon it, for it is a matter on which I have no experience to record, and on which I would not venture to dogmatise. Clear as are the differences brought out by the illustrations, it would seem to me very necessary that a much more extended observation should be made before generalisation is given. It is manifestly not enough to argue from one specimen only of each class of horse. Nothing is said as to the respective ages of the horses the bones of which have been examined. It is only when one can assert the practical universality of the respective appearances presented that it is safe to draw a general conclusion. And I can imagine someone saying, "Have you examined the bones of a Clydesdale horse?" They might be disposed to join you in condemnation of the Shire, but they would not so readily agree about the Clydesdale, especially if they were Scotch! Further, you appear to take it for granted wherein the strength of a bone rests, but I question if you would get agreement even about this. The subject is, as I said, interesting and important, but I should be disposed to say that it required a much more extended and careful enquiry.—J. Augustus Voeleker.

CORRESPONDENCE.

UNTIRING FOREST COBS

[To the Editor of "Country Life."]

Sir,—I have noticed working on camp construction lately a number (son five or six) of thick-set cobs, or rather almost miniature cart horses. active, quick movers, they trot to work each morning, and in the evening them going home still trotting after six hours carting ballast (heavy gravel). They are nearly all greys, and stand about 14h. 1in. to 14h. 3in. On enquiry of their carters, I find they are all related, being out of Forest mares by a Welsh pony, or rather cob, standing at Fordingbridge. This sire is aged and a grey. Perhaps you can trace him? None of the carters remembered the sire's name, although all agreed he stood at Fordingbridge, was a grey, aged, and they thought Welsh. I enclose a rough draft sketch done from memory. I had not time to do one from life, but I see them every

day, so the sketch ought to be more or less true to life. You will notice the Arab head, rather goose rump, and that the cob is a trifle back at the knee. Otherwise he strikes as a "topper," and although bred in these parts, you will note the elimination of Forest type except in the head.—L. E.

[Our correspondent's letter was forwarded to our hunting correspon-dent, who writes: "L. E.'s sketch is taken from a pony whose is quite well known in the Forest These are known as Truck ponies. enclose a photograph showing the class for these ponies at the Burley Show being inspected by the late Lord Arthur Cecil, who was a great admirer of the sort. Many ponies of this type were formerly bred in the north-west corner of the Forest not far from Fordingbridge, There was, about 1889, a strong infusion of Arab blood in this district. The late Mr. Frederic Fane and his tenants owned several half-breds,

the register tells me that a man named Newman had some their descendants running out for years after the date mentioned. These mares, which showed strongly marked traces of Arab descent, were

crossed with ponies type, probably Welsh cobs There was also in this district a Mr. Ings. who bred a number of useful draught ponies recently. At the present time there is a very handsome and powerful stallion, Pickett Greyling, by Dyoll Starlight of a mare by a Welsh This pony has been running on the Forest, and the co moners tell me that his stock are excel-The pony himlent. self is a grand worker, full of cour-age and, as 'L. E.' says of the ponies he saw at Romsey, able

to trot a good pace to and from his work. Thus we see there are in these active cart ponies, first the New Forest foundation, then the Arab, next ob, and possibly the light cart-horse strain, of which there are many examples in the forest. I am sorry to say that these ponies are, in the present demand, being bought and taken away much faster than the Foresters can breed them."—ED.]

THE WOODCOCK MIGRATION ACROSS DENMARK. [TO THE EDITOR OF "COUNTRY LIFE."]

Sir,—Having regard to the fact that this year, on account of the war, very few woodcock indeed were shot in Germany and Austria during the great spring migration, instead of the many thousands which under ordinary circum stances are killed in these countries at that period of the year, a perceptible increase in the number of the birds as they passed over Denmark might have been expected. Such, however, was not observed, and the reason would seem to be that many went north, especially in April, without resting as they usually do in Jutland, Funen and Zealand. A few individuals were seen as early as the end of February, but the flights began to put in an appearance about the normal time, the middle of March, and in the third week of that month the main body commenced to arrive. In Jutland the bulk of the migrating birds adhered to their usual route along the East Coast, and during the first three weeks of April many were seen in the well known district of Djursland. Such, too, was the case in the country somewhat further to the north, between the Mariager Fjord and the Limfjord. On the night of March 23-24, with a south-west wind, a small flight arrived in the Frederikshavn neighbourhood, a very favourite resort of the woodcock. Cold weather and north-west wind then set in, and lasted until the end of the month, after which, for about a week, the birds continued to come. On the night of April 20-21 a big flight arrived, the largest of the season; and the night of April 20-21 a Dig night arrived, the largest of the season; and next day, the weather being favourable, they continued their journey. A smaller number than usual of the migrating woodcock passed along the West Coast of Jutland, and a larger number through the central districts of the Peninsula. The Funen woods would seem to have been favoured by the birds, but the reverse was the case in Lolland and Falster. There, curiously enough, tracts of woodland to which they generally resort were avoided by them, while a good many were observed in places where they are seldom seen except during the migration southwards in the autumn.

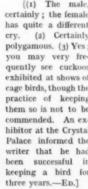
On Möen there were more birds than in an ordinary year. The first great flight arrived on March 23rd, a smaller one on March 26th, and others sno ceeded between April 1st and April 5th. After the 12th of that month none was seen. In the Vallo neighbourhood there were said to be m woodcock than usual. Such, too, was the case in regard to the woods in the north-eastern part of Zealand; but the birds did not make a long stay in these parts. None was seen before March 30th or after April 10th.—G. LINDESAY.

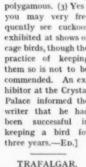


SIR.—Can any of your readers answer the following questions? (1) Is it only the male cuckoo that utters the familiar call? I presume it is, because in the case of song birds it is only the male who sings, while, as regards all other birds with which I am acquainted, the sexes have very different calls, e.g., the mallard and

wild duck. (2) Is it known whether the cuckoo is monogamou is or polygamous ? I think that it would be almost impossible to prove this. (3) Have cuckoos ever been kept alive in confinement for any considerable time—say a year?—A. K. -say a year ?—A. K.

[(1) The male, certainly; the female has quite a different cry. (2) Certainly polygamous, (3) Yes; you may very fre-quently see cuckoos exhibited at shows of cage birds, though the practice of keeping them so is not to be commended. An exhibitor at the Crystal Palace informed the writer that he had been successful in keeping a bird for three years.-ED.]









NEW FOREST TRUCK PONIES.

A HAULAGE COB

trivial and interminable correspondence on the pronunciation of Trafalgar? In the fifties, during the Crimean War, a friend of my father's was in our ho and the two talked of the Peninsular War and incidentally of Trafalgar. Wi he left, 1, or someone, said to my father: "Why do you and the old Major pronounce Trafalgar 'Trafalgar'?" And he said when he was young, up to 1820 or 1830, everyone called it "Trafalgar," but he thought that people singing "Twas in Trafalgar Bay" changed the pronunciation for the new generation for ever.

Sweeps.—I am curious to know why country-folk salute sweeps. When I was young it was a common habit. A few weeks ago in Whitby I saw a -looking young lady bow to a sweep across the street, and he instantly took off his cap and gave a happy grin; and the other day, walking down a hill behind two sweeps, a coster's cart with two gipsy-like men, coming up, passed them, and as they passed me one said to the other: "Them ruddy (a peculiarly inappropriate word) sweeps is bound to give us luck." Why luck

I thought saluting sweeps was equivalent to taking off one's hat to the Devil.

Migrants.—In this smoky, grime-laden, southern division of the West Riding we have this year more swifts, swallows and warblers than for ten years past. Whitethroats have come to build near a watered shoot they have not visited for five years, and the copses are full of wood wrens. Have the deadly bird-nets of the Pyrenees been stopped this year? It is not the Continental war. A nice lad writes to me from the front that I should enjoy being there because there are such a lot of jolly birds! Moreover, to those who recognise that instinct is merely unconscious memory, no migrant bred in France or Belgium will cross over to England, -South Yorks.



THE AMERICAN ROBIN.

A TRANS-ATLANTIC SONGSTER

TO THE EDITOR OF "COUNTRY LIFE."

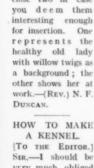
 S_{IB} ,—The enclosed photographs of the American robin were taken last year in Northern Alberta. The nest is very much like that of the English blackbird, but has a coating of mud under the lining. The eggs are as blue as those of the hedge sparrow, and unspotted.-H. H. PITTMAN, Saskatchewan.

THE WILLOW-PEELER.

TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—Calling on May 6th to see one of my parishioners, who is in her nineticth year and who is shortly to undergo an operation for cataract, I found that she was not at home. A neighbour informed me that she had gone to do a day's work at willow-peeling, and at last I found her in a shed near the river busily employed with the "twigs" or "withes," which she and another worker were stripping of their bark by means of a somewhat primitive but very effective V-shaped piece of iron through which the willow lengths are

pulled for the purpose. Having my camera with me, I took some photo-graphs of the good old dame, and en-close two in case you deem them interesting enough for insertion. One represents the healthy old lady with willow twigs as a background; the other shows her at work.—(Rev.) N. F. DUNCAN.



[To THE EDITOR.]
SIR,—I should be very much obliged to any of your readers who could give me a good design for a kennel for a yard dog, which a village carfor penter could make. His ideas do not please me, and he says that mine are



not workable. It shows how unobservant one is of everyday things that I cannot give him a plan of what I want—a substantial, draught-proof easily-cleaned kennel.-M. P.

A NEW VILLAGE WAR INDUSTRY.

[TO THE EDITOR OF "COUNTRY LIFE."]
SIR,—Formerly the shell cases were made of leather, but recently it was found more practicable to make the cases of specially selected imported cane, as they are lighter to handle and have the same strength as leather. In Castle Donington (close by lies Donington Hall, of which so much has been written lately concerning German prisoners) the staple industry is basket making, of which the workers, since war broke out, have devoted themselves entirely to this new branch of industry. A part of this has been distributed to villages in the neighbourhood where basket making is carried on to a small extent. Photograph No. r represents the mould on which the shell case is formed, and is made of hard wood screwed on to three stout wood planks. The second disc next to the one screwed to the planks is of brass, and revolves

plaiting the cane, and also receives the supports which put through аге holes in the larger wooden disc above it. The worker, who sits on the floor, selects the stout canes (which have to be kept moist and pliable in wet sacks, otherwise if dry they break while being manipulated) and slips them through the holes, and then works the thinner canes between the supports at bottom of the disc. The worker now sits on a box—for it must be borne in mind the length of the case is about 3ft.—and puts two stout bands which give greater security to the case. Then he neatly clips off the supports when he has about reached the top of the mould. The workers shown in the photographs receive very good wages, and make £4 to £5 a week, according to the amount of work done.-

P. BEDFORD.

A RETRIEVING FOX.

TO THE EDITOR SIR,-Mr. Nicholletter on Intelligent son's " An but Undesirable Cat" in your issue of May 8th brings to mind a tame fox which lived in my garden some years ago. It was brought to me by some masons who had discovered it, and another which was dead before it reached me, in repairing an old



THE MOULD FOR A SHELL CASE.



PLAITING THE CANE.

stone drain beneath a country house, the vixen having made her couch right under the dining-room. under the dining-room. She was not seen by the men; but the cubs, being only a few days old, blind and quite helpless, had doubless been born there, and the rest of t.e litter may have been removed by their parent before the men reached their nest. The surviving cub we reared with the help of a feeding bottle, and it grew up very tame with those with whom it was familiar, although always very shy in the presence of strangers. It always enjoyed the run of a large walled garden, and slept in a barrel provided for it in a potting shed. When pleased, it wagged its tail after the manner of it in a potting shed. a dog, and it romped freely with either a fox-terrier or a retriever whenever either of them could be induced to play, rolling about on the grass with them, and chasing or being chased by them all round the place. I used frequently to shoot blackbirds or sparrows for it, and it very soon became not only quite familiar with but fond of the gun. The moment I appeared with gun in hand it followed close to heel, slinking along noiselessly in a stalk, and bolting forward the instant a shot was fired to secure the fallen game. The latter were generally quickly devoured, in place of being "retrieved"; but when not too hungry, I have often seen it following behind me, on the look out for another victim, with the first still in its mouth.—George Bolam.

THE HESSIAN FLY, AND THE LITTLE FLEAS [TO THE EDITOR OF "COUNTRY LIFE."]

Sir,-The existence of a state of war in the world of lower organisms may seem, to human beings fighting against one another, to be of comparatively minor significance. Yet, not only is the war waged between the various lower forms of life whose interests are opposed to one another never ending, but effects of vital consequence to man himself follow, in many cases, from its local and general results. Man cannot even engage in war with his own kind without incurring the danger of upsetting the balance of power normally resulting from this other and more naturally waged war, and it is to this fact we owe the common association of human warfare and disease, the latter being the outcome of conditions specially favourable to the increase in number and power of organisms prejudicial to human life and health. This close connection of disease with war has not, however, remained unaffected by the later discoveries of science, which have placed in man's hands means for dealing more effectu-

former,

in some cases, even of pre-

venting its onslaught; so

that, although war is still favourable to

disease, the

directly to it

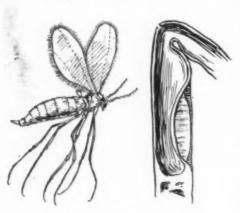
are smaller in

proportion to what they

have been in former times.

But, as well as lower organ-

isms whose



THE HESSIAN FLY.

success in the existence, beyond a certain limit, is an immediate cause of death in man, there are many other forms of life that, if not held in check, would, though indirectly, prove almost if not quite as disastrous to him. A good example of the latter is afforded by the Hessian fly, which every year does incalculable damage to crops of barley and wheat, and which in America, in certain disastrous seasons, has almost ruined the entire wheat crop. The Hessian fly first appeared in America during the War of Independence, and the name given it—which it has retained ever since—originated from the coincidence of its first appearing with the importation of Hessian troops. The fly itself is a small black gnat, and belongs to the same group of insects as another of man's enemies, the mosquito. But in the case of the Hessian fly the stage in which it works most evil is the larval, in which, as a tiny grub from a minute egg deposited on a blade, or on the sheath or tube which forms the lower portion of a stalk of barley or wheat—it travels downwards towards the stem until it reaches a point where the protecting leaf-sheath is wrapped The obstruction met with here, however, is not such as closely round it. to baulk it, and so it continues downwards by forcing its way between the stem and sheath, until, at last, some 4in. lower down, its progress is effectually blocked by the occurrence of a partition wall, or node. Here, prior to its changing into a chrysalis, it feeds on the life-blood of the stalk, which finally collapses at a point a little distance above where the grub has been tapping its vital juices. When one considers that a single female Hessian fly has been observed to lay as many as 158 eggs on six distinct plants, some idea may be obtained of what the rate of increase of, and the damage done by, these insects would be, were each egg to be hatched out and every grub become a perfect insect. The Hessian fly, however, is not without its powerful enemies, and one of the most successful of these is an ichneumon fly, which seeks out the barley or wheat infested with the destructive grub, and, piercing the hard leaf blade with her lancet-like ovipositor, injects her eggs into its living body. It is estimated that by the parasites emerging in due course from these eggs more than nine-tenths of the Hessian fly grubs hatched out in America are destroyed before they reach maturity, But the Hessian fly is one only of innumerable forms of life on whose success in the struggle for existence the human race as a whole stands, either directly or indirectly, to gain or to lose as much, or even far more than from a local and temporary state of war between one set of human beings and another.—NORMAN C. GOULD.

ECONOMY IN THE GARDEN.

[TO THE EDITOR OF "COUNTRY LIFE."]

SIR,—I am sending you a photograph of a little girl sowing "seed tape"—
an American novelty, made by a firm in Chicago. I fancy that seed tape is unknown to most English amateur gardeners. It consists of seeds equally spaced in folded tough paper, which is fixed with fertilising glue. achines are said to turn out 100,000ft. of the tape in a day, which



SOWING WITH SEED TAPE

in be laid in the ground as fast as it can be unwound from a reel. It is claimed that by this method a saving of 40 per cent. of seeds is effected.—HAROLD BASTIN.

PRACTICAL SUGGESTIONS AGAINST ZEPPELINS. [To the Editor of "Country Life."]

SIR,—Some useful observations are published in COUNTRY LIFE of May 15th to the effect that it would be a great mistake to minimise the importance of Zeppelin attacks. If a number of fires are caused by aircraft in any locality, it is obvious that the fire brigade may be monopolised by the earlier outbreaks, and it is of great consequence that such practical precautions as are possible should be taken by all householders. Among these are the provision of candles and matches in every bedroom, as, in the event of an attack at night, the supply of gas or electricity may fail, or be cut off, and the comfort and of everyone will be increased by being able to obtain light. be as well, also, if all fixed baths be kept filled with water at night, with some pails standing near handy, so that any outbreak of fire may be extinguished in its earliest stages by those living on the premises .- I. LANDFEAR LUCAS.

THE STORY OF A JACKDAW. [To the Editor of "Country Life."]

Sir,—This jackdaw was discovered hanging up outside a cottage, in a very small wicker cage, by the little girl's mother. She bought him for 9d. He



FREEDOM'S CHAIN.

ras in very poor condition, and soon developed a bad cough. He was put into a blanket near the kitchen fire and given a little whisky. Under this treatment he soon recovered, and now leads a free and happy life in the garden. He is so tame that he comes when anyone calls him, and is quite friendly with a terrier, often picking bits of the dog's dinner. At tea time he hops on to anyone's shoulder, and will eat tit-bits out of their hands.—Adelaide Teevan.